NSA.Model

Erzeugt von Doxygen 1.8.11

Inhaltsverzeichnis

1	Verz	reichnis der Namensbereiche	1
	1.1	Pakete	1
2	Hier	archie-Verzeichnis	3
	2.1	Klassenhierarchie	3
3	Klas	ssen-Verzeichnis	5
	3.1	Auflistung der Klassen	5
4	Date	ei-Verzeichnis	7
	4.1	Auflistung der Dateien	7
5	Dok	umentation der Namensbereiche	9
	5.1	NSA-Namensbereichsreferenz	9
	5.2	NSA.Model-Namensbereichsreferenz	9
	5.3	NSA.Model.BusinessLogic-Namensbereichsreferenz	9
	5.4	NSA.Model.NetworkComponents-Namensbereichsreferenz	9
	5.5	NSA.Model.NetworkComponents.Helper_Classes-Namensbereichsreferenz	10
	5.6	NSA.Model.NetworkComponents.Layers-Namensbereichsreferenz	10

iv INHALTSVERZEICHNIS

6	Klas	sen-Do	kumentat	ion	11
	6.1	NSA.N	lodel.Netw	vorkComponents.Layers.ApplicationLayer Klassenreferenz	11
		6.1.1	Dokume	ntation der Elementfunktionen	12
			6.1.1.1	ValidateReceive()	12
			6.1.1.2	ValidateSend(ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary< string, Connection > connections, Routingtable routingtable)	12
	6.2	NSA.M	lodel.Netw	vorkComponents.Computer Klassenreferenz	13
		6.2.1	Beschrei	bung der Konstruktoren und Destruktoren	14
			6.2.1.1	Computer(string Name)	14
	6.3	NSA.N	odel.Netw	vorkComponents.Connection Klassenreferenz	14
		6.3.1	Beschrei	bung der Konstruktoren und Destruktoren	14
			6.3.1.1	Connection(Hardwarenode Source, Hardwarenode Target)	14
		6.3.2	Dokume	ntation der Propertys	14
			6.3.2.1	End	15
			6.3.2.2	Name	15
			6.3.2.3	Start	15
	6.4	NSA.M	lodel.Netw	vorkComponents.Layers.DataLinkLayer Klassenreferenz	15
		6.4.1	Dokume	ntation der Elementfunktionen	16
			6.4.1.1	ValidateReceive()	16
			6.4.1.2	ValidateSend(ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary< string, Connection > connections, Routingtable routingtable)	16
	6.5	NSA.M	lodel.Netw	vorkComponents.Hardwarenode Klassenreferenz	17
		6.5.1	Beschrei	bung der Konstruktoren und Destruktoren	18
			6.5.1.1	Hardwarenode(string Name)	18
		6.5.2	Dokume	ntation der Elementfunktionen	18
			6.5.2.1	AddConnection(Connection Con, string IfaceName)	18
			6.5.2.2	AddLayer(ILayer Lay)	18
			6.5.2.3	HasIP(IPAddress ip)	19
			6.5.2.4	${\sf Receive}(ref\ Dictionary < string,\ object > Tags,\ ref\ string\ Result) \ \ \ldots \ \ \ldots \ \ \ldots$	19
			6.5.2.5	RemoveConnection(string IfaceName)	20

INHALTSVERZEICHNIS v

		6.5.2.6	RemoveLayer(ILayer Lay)	20
		6.5.2.7	Send(Hardwarenode Destination, ref Dictionary< string, object > Tags, ref string Result)	20
	6.5.3	Dokumer	ntation der Datenelemente	21
		6.5.3.1	connections	21
		6.5.3.2	layerstack	21
	6.5.4	Dokumer	ntation der Propertys	21
		6.5.4.1	Name	21
6.6	NSA.M	lodel.Netw	vorkComponents.ILayer Schnittstellenreferenz	22
	6.6.1	Dokumer	ntation der Elementfunktionen	22
		6.6.1.1	ValidateReceive()	22
		6.6.1.2	ValidateSend(ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary< string, Connection > connections, Routingtable routingtable)	23
6.7	NSA.N	lodel.Netw	vorkComponents.Interface Klassenreferenz	23
	6.7.1	Beschrei	bung der Konstruktoren und Destruktoren	23
		6.7.1.1	Interface(IPAddress Ip, IPAddress Mask, int Number)	23
	6.7.2	Dokumer	ntation der Propertys	24
		6.7.2.1	IpAddress	24
		6.7.2.2	Name	24
		6.7.2.3	Subnetmask	24
6.8	NSA.M	lodel.Netw	rorkComponents.Helper_Classes.IPAddressExtensions Klassenreferenz	24
	6.8.1	Dokumer	ntation der Elementfunktionen	24
		6.8.1.1	GetBroadcastAddress(this IPAddress address, IPAddress subnetMask)	24
		6.8.1.2	GetNetworkAddress(this IPAddress address, IPAddress subnetMask)	24
		6.8.1.3	IsInSameSubnet(this IPAddress address2, IPAddress address, IPAddress subnetMask)	24
6.9	NSA.N	lodel.Netw	vorkComponents.Layerstack Klassenreferenz	24
	6.9.1	Beschrei	bung der Konstruktoren und Destruktoren	25
		6.9.1.1	Layerstack()	25
	6.9.2	Dokumer	ntation der Elementfunktionen	25
		6.9.2.1	AddLayer(ILayer lay)	25

vi INHALTSVERZEICHNIS

		6.9.2.2	GetLayer(int index)	25
		6.9.2.3	GetSize()	25
		6.9.2.4	RemoveLayer(ILayer lay)	26
6.10	NSA.M	odel.Netw	orkComponents.Network Klassenreferenz	26
	6.10.1	Beschreit	oung der Konstruktoren und Destruktoren	26
		6.10.1.1	Network()	26
	6.10.2	Dokumer	ntation der Elementfunktionen	26
		6.10.2.1	AddConnection(Connection newConnection)	26
		6.10.2.2	AddHardwarenode(Hardwarenode newNode)	27
		6.10.2.3	GetHardwarenodeByName(string name)	27
		6.10.2.4	RemoveConnection(string ConnectionName)	27
		6.10.2.5	RemoveHardwarnode(string name)	27
6.11	NSA.M	odel.Netw	orkComponents.Layers.NetworkLayer Klassenreferenz	28
	6.11.1	Dokumer	ntation der Elementfunktionen	29
		6.11.1.1	ValidateReceive()	29
		6.11.1.2	ValidateSend(ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary< string, Connection > connections, Routingtable routingtable)	29
6.12	NSA.M	odel.Busir	nessLogic.Packet Klassenreferenz	29
	6.12.1	Beschreit	oung der Konstruktoren und Destruktoren	30
		6.12.1.1	Packet(Hardwarenode _source, Hardwarenode _destination, int _ttl, Dictionary< string, object > _tags)	30
	6.12.2	Dokumer	ntation der Elementfunktionen	30
		6.12.2.1	Send()	30
6.13	NSA.M	odel.Netw	orkComponents.Layers.PhysicalLayer Klassenreferenz	31
	6.13.1	Dokumer	ntation der Elementfunktionen	31
		6.13.1.1	ValidateReceive()	31
		6.13.1.2	ValidateSend(ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary< string, Connection > connections, Routingtable routingtable)	32
6.14	NSA.M	odel.Netw	orkComponents.Layers.PresentationLayer Klassenreferenz	32
	6.14.1	Dokumer	ntation der Elementfunktionen	33
		6.14.1.1	ValidateReceive()	33

INHALTSVERZEICHNIS vii

		0.14.1.2	interfaceName, Workstation destination, Dictionary< string, Connection >	
			connections, Routingtable routingtable)	33
6.15	NSA.M	lodel.Busir	nessLogic.Project Klassenreferenz	33
	6.15.1	Beschreil	bung der Konstruktoren und Destruktoren	34
		6.15.1.1	Project()	34
6.16	NSA.M	lodel.Netw	orkComponents.Route Klassenreferenz	34
	6.16.1	Beschreil	oung der Konstruktoren und Destruktoren	34
		6.16.1.1	Route(IPAddress Destination, IPAddress Subnetmask, IPAddress Gateway, Interface Iface)	34
	6.16.2	Dokumer	ntation der Propertys	34
		6.16.2.1	Destination	34
		6.16.2.2	Gateway	34
		6.16.2.3	Iface	35
		6.16.2.4	Subnetmask	35
6.17	NSA.M	lodel.Netw	orkComponents.Router Klassenreferenz	35
	6.17.1	Beschreil	bung der Konstruktoren und Destruktoren	36
		6.17.1.1	Router(string name)	36
	6.17.2	Dokumer	ntation der Propertys	37
		6.17.2.1	IsGateway	37
6.18	NSA.M	lodel.Netw	orkComponents.Routingtable Klassenreferenz	37
	6.18.1	Dokumer	ntation der Elementfunktionen	37
		6.18.1.1	AddRoute(Route Route)	37
		6.18.1.2	GetRouteAt(int Index)	37
		6.18.1.3	GetSize()	38
		6.18.1.4	RemoveRoute(Route Route)	38
		6.18.1.5	RemoveRouteAtIndex(int Index)	38
6.19	NSA.M	lodel.Netw	orkComponents.Layers.SessionLayer Klassenreferenz	38
	6.19.1	Dokumer	ntation der Elementfunktionen	39
		6.19.1.1	ValidateReceive()	39
		6.19.1.2	ValidateSend(ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary< string, Connection > connections, Routingtable routingtable)	39

viii INHALTSVERZEICHNIS

6.20	NSA.M	odel.Busin	nessLogic.Simulation Klassenreferenz	0
	6.20.1	Beschreit	oung der Konstruktoren und Destruktoren	0
		6.20.1.1	Simulation(string _id, bool _result)	0
	6.20.2	Dokumen	ntation der Elementfunktionen	0
		6.20.2.1	AddPacketSend(Packet packet)	0
		6.20.2.2	Execute()	0
6.21	NSA.M	odel.Netw	orkComponents.Switch Klassenreferenz	-1
	6.21.1	Beschreit	oung der Konstruktoren und Destruktoren	2
		6.21.1.1	Switch(string name)	2
	6.21.2	Dokumen	ntation der Elementfunktionen	2
		6.21.2.1	AddInterface()	2
		6.21.2.2	GetInterfaces()	2
		6.21.2.3	RemoveInterface(string IfaceName)	2
6.22	NSA.M	odel.Busin	nessLogic.Testscenario Klassenreferenz	2
	6.22.1	Beschreit	oung der Konstruktoren und Destruktoren	.3
		6.22.1.1	Testscenario()	.3
		6.22.1.2	Testscenario(string id)	.3
	6.22.2	Dokumen	ntation der Propertys	.3
		6.22.2.1	ld	.3
6.23	NSA.M	odel.Netw	orkComponents.Layers.TransportLayer Klassenreferenz	.3
	6.23.1	Dokumen	ntation der Elementfunktionen	.4
		6.23.1.1	ValidateReceive() 4	4
		6.23.1.2	ValidateSend(ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary< string, Connection > connections, Routingtable routingtable)	4
6.24	NSA.M	odel.Netw	orkComponents.Workstation Klassenreferenz	5
			bung der Konstruktoren und Destruktoren	6
		6.24.1.1		6
	6.24.2	Dokumen	ntation der Elementfunktionen	6
		6.24.2.1	AddInterface(Interface Iface)	6
				_
		6.24.2.2	AddRoute(Route Route)	٠/
		6.24.2.2 6.24.2.3	AddRoute(Route Route) 4 GetInterfaces() 4	
				7
		6.24.2.3	GetInterfaces()	7
		6.24.2.3 6.24.2.4	GetInterfaces() 4 GetRouteAt(int Index) 4	7 7 7
		6.24.2.3 6.24.2.4 6.24.2.5	GetInterfaces() 4 GetRouteAt(int Index) 4 GetRouteCount() 4	7 7 7
		6.24.2.3 6.24.2.4 6.24.2.5 6.24.2.6	GetInterfaces() 4 GetRouteAt(int Index) 4 GetRouteCount() 4 HasIP(IPAddress Ip) 4	7 7 8 8
		6.24.2.3 6.24.2.4 6.24.2.5 6.24.2.6 6.24.2.7	GetInterfaces() 4 GetRouteAt(int Index) 4 GetRouteCount() 4 HasIP(IPAddress Ip) 4 Receive(ref Dictionary< string, object > Tags, ref string Result) 4	7 7 8 8
		6.24.2.3 6.24.2.4 6.24.2.5 6.24.2.6 6.24.2.7 6.24.2.8 6.24.2.9	GetInterfaces() 4 GetRouteAt(int Index) 4 GetRouteCount() 4 HasIP(IPAddress Ip) 4 Receive(ref Dictionary< string, object > Tags, ref string Result) 4 RemoveInterface(Interface Iface) 4 RemoveRoute(Route Route) 4 Send(Hardwarenode Destination, ref Dictionary< string, object > Tags, ref string	7 7 8 8 8
	6242	6.24.2.3 6.24.2.4 6.24.2.5 6.24.2.6 6.24.2.7 6.24.2.8 6.24.2.9 6.24.2.10	GetInterfaces() 4 GetRouteAt(int Index) 4 GetRouteCount() 4 HasIP(IPAddress Ip) 4 Receive(ref Dictionary< string, object > Tags, ref string Result) 4 RemoveInterface(Interface Iface) 4 RemoveRoute(Route Route) 4 Send(Hardwarenode Destination, ref Dictionary< string, object > Tags, ref string Result) 4	7 7 8 8 8
	6.24.3	6.24.2.3 6.24.2.4 6.24.2.5 6.24.2.6 6.24.2.7 6.24.2.8 6.24.2.9 6.24.2.10	GetInterfaces() 4 GetRouteAt(int Index) 4 GetRouteCount() 4 HasIP(IPAddress Ip) 4 Receive(ref Dictionary< string, object > Tags, ref string Result) 4 RemoveInterface(Interface Iface) 4 RemoveRoute(Route Route) 4 Send(Hardwarenode Destination, ref Dictionary< string, object > Tags, ref string	7 7 8 8 8 9

INHALTSVERZEICHNIS ix

7	Date	i-Dokumentation	51
	7.1	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/← BusinessLogic/Packet.cs-Dateireferenz	51
	7.2	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/← BusinessLogic/Project.cs-Dateireferenz	51
	7.3	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ BusinessLogic/Simulation.cs-Dateire ferenz$	51
	7.4	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/↔ BusinessLogic/Testscenario.cs-Dateireferenz	52
	7.5	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Computer.cs-Dateire ferenz$	52
	7.6	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Connection.cs-Dateire ferenz$	52
	7.7	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Hardwarenode.cs-Dateireferenz$	52
	7.8	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/← NetworkComponents/Helper Classes/IPAddressExtensions.cs-Dateireferenz	53
	7.9	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/ILayer.cs-Dateire ferenz$	53
	7.10	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Interface.cs-Dateire ferenz$	53
	7.11	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Layers/ApplicationLayer.cs-Dateire ferenz$	53
	7.12	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Layers/DataLinkLayer.cs-Dateireferenz \\ \\ $	54
	7.13	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Layers/NetworkLayer.cs-Dateire ferenz$	54
	7.14	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Layers/PhysicalLayer.cs-Dateire ferenz$	54
	7.15	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Layers/PresentationLayer.cs-Dateireferenz$	54
	7.16	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Layers/SessionLayer.cs-Dateire ferenz$	55
	7.17	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/ \\ \\ NetworkComponents/Layers/TransportLayer.cs-Dateire ferenz$	55
	7.18	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/← NetworkComponents/Layerstack.cs-Dateireferenz	55
	7.19	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/↔ NetworkComponents/Network.cs-Dateireferenz	55

INHALTSVERZEICHNIS

Index		59
7.28	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/← Properties/AssemblyInfo.cs-Dateireferenz	57
7.27	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/obj/\\ -Debug/TemporaryGeneratedFile_E7A71F73-0F8D-4B9B-B56E-8E70B10BC5D3.cs-Dateireferenz \ .$	57
7.26	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/obj/\\ -Debug/TemporaryGeneratedFile_5937a670-0e60-4077-877b-f7221da3dda1.cs-Dateireferenz$	57
7.25	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/obj/\\ Debug/TemporaryGeneratedFile_036C0B5B-1481-4323-8D20-8F5ADCB23D92.cs-Dateireferenz .$	57
7.24	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/← NetworkComponents/Workstation.cs-Dateireferenz	57
7.23	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/← NetworkComponents/Switch.cs-Dateireferenz	56
7.22	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/← NetworkComponents/Routingtable.cs-Dateireferenz	56
7.21	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/← NetworkComponents/Router.cs-Dateireferenz	56
7.20	C:/SWP16/Basisverzeichnis/trunk/03_implementierung/NetworkSimulatorAnalyzer/NSA.Model/ NetworkComponents/Route.cs-Dateireferenz	56

Kapitel 1

Verzeichnis der Namensbereiche

1.1 Pakete

Hier folgen die Pakete mit einer Kurzbeschreibung (wenn verfügbar):

NSA	9
NSA.Model	ç
NSA.Model.BusinessLogic	ç
NSA.Model.NetworkComponents	ç
NSA.Model.NetworkComponents.Helper_Classes	10
NSA Model NetworkComponents Layers	10

Kapitel 2

Hierarchie-Verzeichnis

2.1 Klassenhierarchie

Die Liste der Ableitungen ist -mit Einschränkungen- alphabetisch sortiert:

NSA.Model.NetworkComponents.Connection
NSA.Model.NetworkComponents.Hardwarenode
NSA.Model.NetworkComponents.Switch
NSA.Model.NetworkComponents.Workstation
NSA.Model.NetworkComponents.Computer
NSA.Model.NetworkComponents.Router
NSA.Model.NetworkComponents.ILayer
NSA.Model.NetworkComponents.Layers.ApplicationLayer
NSA.Model.NetworkComponents.Layers.DataLinkLayer
NSA.Model.NetworkComponents.Layers.NetworkLayer
NSA.Model.NetworkComponents.Layers.PhysicalLayer
NSA.Model.NetworkComponents.Layers.PresentationLayer
NSA.Model.NetworkComponents.Layers.SessionLayer
NSA.Model.NetworkComponents.Layers.TransportLayer
NSA.Model.NetworkComponents.Interface
NSA.Model.NetworkComponents.Helper_Classes.IPAddressExtensions
NSA.Model.NetworkComponents.Layerstack
NSA.Model.NetworkComponents.Network
NSA.Model.BusinessLogic.Packet
NSA.Model.BusinessLogic.Project
NSA.Model.NetworkComponents.Route
NSA.Model.NetworkComponents.Routingtable
NSA.Model.BusinessLogic.Simulation
NSA.Model.BusinessLogic.Testscenario

4 Hierarchie-Verzeichnis

Kapitel 3

Klassen-Verzeichnis

3.1 Auflistung der Klassen

Hier folgt die Aufzählung aller Klassen, Strukturen, Varianten und Schnittstellen mit einer Kurzbeschreibung:

NSA.Model.NetworkComponents.Layers.ApplicationLayer
NSA.Model.NetworkComponents.Computer
NSA.Model.NetworkComponents.Connection
NSA.Model.NetworkComponents.Layers.DataLinkLayer
NSA.Model.NetworkComponents.Hardwarenode
NSA.Model.NetworkComponents.ILayer
NSA.Model.NetworkComponents.Interface
NSA.Model.NetworkComponents.Helper_Classes.IPAddressExtensions
NSA.Model.NetworkComponents.Layerstack
NSA.Model.NetworkComponents.Network
NSA.Model.NetworkComponents.Layers.NetworkLayer
NSA.Model.BusinessLogic.Packet
NSA.Model.NetworkComponents.Layers.PhysicalLayer
NSA.Model.NetworkComponents.Layers.PresentationLayer
NSA.Model.BusinessLogic.Project
NSA.Model.NetworkComponents.Route
NSA.Model.NetworkComponents.Router
NSA.Model.NetworkComponents.Routingtable
NSA.Model.NetworkComponents.Layers.SessionLayer
NSA.Model.BusinessLogic.Simulation
NSA.Model.NetworkComponents.Switch
NSA.Model.BusinessLogic.Testscenario
NSA.Model.NetworkComponents.Layers.TransportLayer
NSA.Model.NetworkComponents.Workstation

6 Klassen-Verzeichnis

Kapitel 4

Datei-Verzeichnis

4.1 Auflistung der Dateien

Hier folgt die Aufzählung aller Dateien mit einer Kurzbeschreibung:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Business ←
Logic/Packet.cs
Logic/Project.cs
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Business↔
Logic/Simulation.cs
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Business↔
— · · · · · · · · · · · · · · · · · · ·
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network← Components/Computer.cs
Components/Computer.cs
Components/Connection.cs 52 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network←
Components/Hardwarenode.cs
Components/ILayer.cs
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network←
Components/Interface.cs
Components/Layerstack.cs
Components/Network.cs
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network←
Components/Route.cs
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network←
Components/Router.cs
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network Companyerte/Switch on
Components/Switch.cs
<u> </u>
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network Components/Helper Classes/IPAddressExtensions.cs
Components/Helper Classes/IPAddressExtensions.cs
Components/Lavers/ApplicationLaver cs

8 Datei-Verzeichnis

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network	
Components/Layers/DataLinkLayer.cs	54
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA. Model/Network \leftarrow \\$	
Components/Layers/NetworkLayer.cs	54
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA. Model/Network \leftarrow \\$	
Components/Layers/PhysicalLayer.cs	54
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA. Model/Network \leftarrow \\$	
Components/Layers/PresentationLayer.cs	54
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA. Model/Network \leftarrow \\$	
Components/Layers/SessionLayer.cs	55
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA. Model/Network \leftarrow \\$	
Components/Layers/TransportLayer.cs	55
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA. Model/obj/{\leftarrow}$	
Debug/TemporaryGeneratedFile_036C0B5B-1481-4323-8D20-8F5ADCB23D92.cs	57
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/obj/←	
Debug/TemporaryGeneratedFile_5937a670-0e60-4077-877b-f7221da3dda1.cs	57
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/obj/←	
Debug/TemporaryGeneratedFile_E7A71F73-0F8D-4B9B-B56E-8E70B10BC5D3.cs	57
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Properties/A	ssembly
Info.cs	57

Kapitel 5

Dokumentation der Namensbereiche

5.1 NSA-Namensbereichsreferenz

Namensbereiche

namespace Model

5.2 NSA.Model-Namensbereichsreferenz

Namensbereiche

- namespace BusinessLogic
- namespace NetworkComponents

5.3 NSA.Model.BusinessLogic-Namensbereichsreferenz

Klassen

- class Packet
- class Project
- class Simulation
- · class Testscenario

5.4 NSA.Model.NetworkComponents-Namensbereichsreferenz

Namensbereiche

- namespace Helper_Classes
- namespace Layers

Klassen

- class Computer
- class Connection
- · class Hardwarenode
- interface ILayer
- class Interface
- · class Layerstack
- class Network
- class Route
- class Router
- · class Routingtable
- class Switch
- · class Workstation

5.5 NSA.Model.NetworkComponents.Helper_Classes-Namensbereichsreferenz

Klassen

• class IPAddressExtensions

5.6 NSA.Model.NetworkComponents.Layers-Namensbereichsreferenz

Klassen

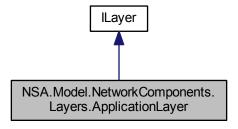
- class ApplicationLayer
- · class DataLinkLayer
- · class NetworkLayer
- class PhysicalLayer
- class PresentationLayer
- class SessionLayer
- · class TransportLayer

Kapitel 6

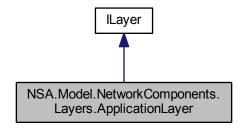
Klassen-Dokumentation

6.1 NSA.Model.NetworkComponents.Layers.ApplicationLayer Klassenreferenz

 $Klass endiagramm\ f\"{u}r\ NSA. Model. Network Components. Layers. Application Layer:$



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Layers.ApplicationLayer:



Öffentliche Methoden

• bool ValidateReceive ()

Validates the layer while receiving a packet.

 void ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

6.1.1	Dokumentation der Elementfunktionen	
6.1.1.1	bool NSA.Model.NetworkComponents.Layers.ApplicationLayer.ValidateReceive ()	
Validat	tes the laver while receiving a packet	

Rückgabe

Boolean value indicating if the validation was successfull

Implementiert NSA.Model.NetworkComponents.ILayer.

6.1.1.2 void NSA.Model.NetworkComponents.Layers.ApplicationLayer.ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodelP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

Rückgabe

null if not successfull or the next Hardwarenode if it was

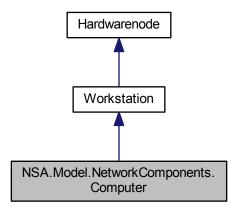
Implementiert NSA.Model.NetworkComponents.ILayer.

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

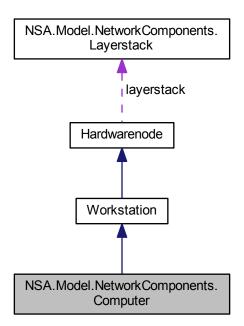
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Layers/ApplicationLayer.cs

6.2 NSA.Model.NetworkComponents.Computer Klassenreferenz

Klassendiagramm für NSA.Model.NetworkComponents.Computer:



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Computer:



Öffentliche Methoden

• Computer (string Name)

Initializes a new instance of the Computer class.

Weitere Geerbte Elemente

6.2.1 Beschreibung der Konstruktoren und Destruktoren

6.2.1.1 NSA.Model.NetworkComponents.Computer.Computer (string Name)

Initializes a new instance of the Computer class.

Parameter

Name	The name.
------	-----------

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Computer.cs

6.3 NSA.Model.NetworkComponents.Connection Klassenreferenz

Öffentliche Methoden

Connection (Hardwarenode Source, Hardwarenode Target)
 Initializes a new instance of the Connection class.

Propertys

- Hardwarenode Start [get]
- Hardwarenode End [get]
- string Name [get]

6.3.1 Beschreibung der Konstruktoren und Destruktoren

6.3.1.1 NSA.Model.NetworkComponents.Connection.Connection (Hardwarenode Source, Hardwarenode Target)

Initializes a new instance of the Connection class.

Parameter

Source	The sourcenode.
Target	The targetnode.

6.3.2 Dokumentation der Propertys

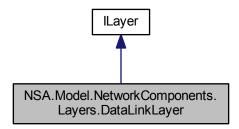
- **6.3.2.1 Hardwarenode NSA.**Model.NetworkComponents.Connection.End [get]
- **6.3.2.2** string NSA.Model.NetworkComponents.Connection.Name [get]
- **6.3.2.3 Hardwarenode NSA.**Model.NetworkComponents.Connection.Start [get]

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

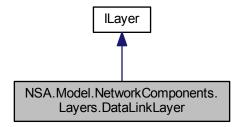
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Connection.cs

6.4 NSA.Model.NetworkComponents.Layers.DataLinkLayer Klassenreferenz

Klassendiagramm für NSA.Model.NetworkComponents.Layers.DataLinkLayer:



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Layers.DataLinkLayer:



Öffentliche Methoden

	void ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary< string, Connection > connections, Routingtable routingtable)
	Validates the layer while sending a packet.
• 1	pool ValidateReceive ()
	Validates the layer while receiving a packet.
6.4.1	Dokumentation der Elementfunktionen
6.4.1.1	bool NSA.Model.NetworkComponents.Layers.DataLinkLayer.ValidateReceive ()
Validat	es the layer while receiving a packet.
Rückga	be
Е	soolean value indicating if the validation was successfull
Implem	nentiert NSA.Model.NetworkComponents.ILayer.
Impien	ichtiert Noz. Model Networkeemperiente. 12 ayer.
6.4.1.2	void NSA.Model.NetworkComponents.Layers.DataLinkLayer.ValidateSend (ref Hardwarenode nextNode, ref
0.4.112	IPAddress nextNodelP, ref string interfaceName, Workstation destination, Dictionary< string, Connection >
	connections, Routingtable routingtable)
Validat	es the layer while sending a packet.
Rückga	be
	ull if not successfull or the next Hardwarenode if it was
•	

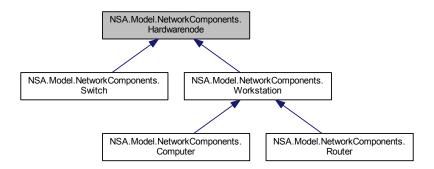
 $Implementiert\ NSA. Model. Network Components. I Layer.$

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

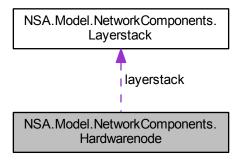
• C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network ← Components/Layers/DataLinkLayer.cs

6.5 NSA.Model.NetworkComponents.Hardwarenode Klassenreferenz

Klassendiagramm für NSA.Model.NetworkComponents.Hardwarenode:



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Hardwarenode:



Öffentliche Methoden

• Hardwarenode (string Name)

Initializes a new instance of the Hardwarenode class.

virtual void AddConnection (Connection Con, string IfaceName)

Adds a connection.

virtual void RemoveConnection (string IfaceName)

Removes a connection.

• void AddLayer (ILayer Lay)

Adds a layer to the layerstack.

void RemoveLayer (ILayer Lay)

Removes a layer from the layerstack.

• virtual bool HasIP (IPAddress ip)

Checks if the Hardwarenode has the IP

 virtual Hardwarenode Send (Hardwarenode Destination, ref Dictionary< string, object > Tags, ref string Result)

Hardwarenode sends the package to specified destination.

 $\bullet \ \ \text{virtual bool } \ \ \text{Receive} \ \ \text{(ref Dictionary} < \ \text{string, object} > \ \ \text{Tags, ref string Result)}$

Hardwarenode receives the package.

Geschützte Attribute

- Layerstack layerstack = new Layerstack()
- Dictionary< string, Connection > connections = new Dictionary<string, Connection>()

Propertys

• string Name [get, set]

6.5.1 Beschreibung der Konstruktoren und Destruktoren

6.5.1.1 NSA.Model.NetworkComponents.Hardwarenode.Hardwarenode (string Name)

Initializes a new instance of the Hardwarenode class.

Parameter

Name The name.

6.5.2 Dokumentation der Elementfunktionen

6.5.2.1 virtual void NSA.Model.NetworkComponents.Hardwarenode.AddConnection (Connection Con, string IfaceName) [virtual]

Adds a connection.

Parameter

Con	The connection to be added.
IfaceName	Name of the interface where the connection should be added.

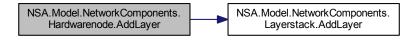
6.5.2.2 void NSA.Model.NetworkComponents.Hardwarenode.AddLayer (ILayer Lay)

Adds a layer to the layerstack.

Parameter

Lay	The layer to be added.

Hier ist ein Graph, der zeigt, was diese Funktion aufruft:



6.5.2.3 virtual bool NSA.Model.NetworkComponents.Hardwarenode.HaslP(IPAddress ip) [virtual]

Checks if the Hardwarenode has the IP

Parameter



Rückgabe

A bool

Erneute Implementation in NSA.Model.NetworkComponents.Workstation.

6.5.2.4 virtual bool NSA.Model.NetworkComponents.Hardwarenode.Receive (ref Dictionary < string, object > Tags, ref string Result) [virtual]

Hardwarenode receives the package.

Parameter

Tags	Optional tags.
Result	String representing the result

Rückgabe

If the Hardwarenode could receive the package

Erneute Implementation in NSA.Model.NetworkComponents.Workstation.

Hier ist ein Graph der zeigt, wo diese Funktion aufgerufen wird:



6.5.2.5 virtual void NSA.Model.NetworkComponents.Hardwarenode.RemoveConnection(string IfaceName) [virtual]

Removes a connection.

Parameter

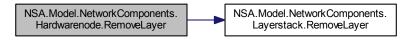
6.5.2.6 void NSA.Model.NetworkComponents.Hardwarenode.RemoveLayer (ILayer Lay)

Removes a layer from the layerstack.

Parameter

Lay	The layer to be removed.
-----	--------------------------

Hier ist ein Graph, der zeigt, was diese Funktion aufruft:



6.5.2.7 virtual Hardwarenode NSA.Model.NetworkComponents.Hardwarenode.Send (Hardwarenode Destination, ref Dictionary< string, object > Tags, ref string Result) [virtual]

Hardwarenode sends the package to specified destination.

Parameter

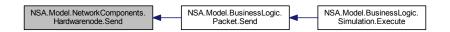
Destination	The destination.
Tags	Optional tags.
Result	String representing the result

Rückgabe

The Hardwarenode which received the package or null if an error occured

 $\label{lem:entropy} Erneute\ Implementation\ in\ NSA. Model. Network Components. Work station.$

Hier ist ein Graph der zeigt, wo diese Funktion aufgerufen wird:



6.5.3 Dokumentation der Datenelemente

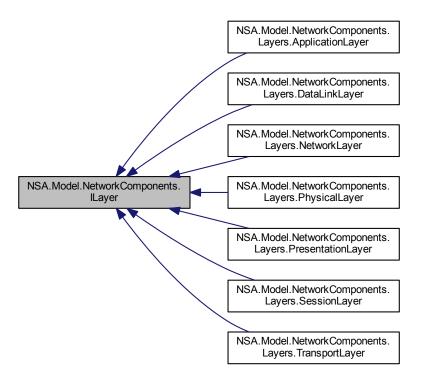
- 6.5.3.1 Dictionary<string, Connection> NSA.Model.NetworkComponents.Hardwarenode.connections = new Dictionary<string, Connection>() [protected]
- **6.5.3.2** Layerstack NSA.Model.NetworkComponents.Hardwarenode.layerstack = new Layerstack() [protected]
- 6.5.4 Dokumentation der Propertys
- **6.5.4.1 string NSA.Model.NetworkComponents.Hardwarenode.Name** [get], [set]

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Hardwarenode.cs

6.6 NSA.Model.NetworkComponents.ILayer Schnittstellenreferenz

Klassendiagramm für NSA.Model.NetworkComponents.ILayer:



Öffentliche Methoden

void ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

• bool ValidateReceive ()

Validates the layer while receiving a packet.

6.6.1 Dokumentation der Elementfunktionen

6.6.1.1 bool NSA.Model.NetworkComponents.lLayer.ValidateReceive ()

Validates the layer while receiving a packet.

Rückgabe

Boolean value indicating if the validation was successfull

Implementiert in NSA.Model.NetworkComponents.Layers.DataLinkLayer, NSA.Model.NetworkComponents.← Layers.NetworkLayer, NSA.Model.NetworkComponents.Layers.ApplicationLayer, NSA.Model.NetworkComponents.← Layers.PhysicalLayer, NSA.Model.NetworkComponents.Layers.PresentationLayer, NSA.Model.Network← Components.Layers.SessionLayer und NSA.Model.NetworkComponents.Layers.TransportLayer.

6.6.1.2 void NSA.Model.NetworkComponents.lLayer.ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodelP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

Rückgabe

null if not successfull or the next Hardwarenode if it was

Implementiert in NSA.Model.NetworkComponents.Layers.NetworkLayer, NSA.Model.NetworkComponents... Layers.ApplicationLayer, NSA.Model.NetworkComponents.Layers.PhysicalLayer, NSA.Model.NetworkComponents... Layers.PresentationLayer, NSA.Model.NetworkComponents.Layers.SessionLayer, NSA.Model.NetworkComponents... Layers.TransportLayer und NSA.Model.NetworkComponents.Layers.DataLinkLayer.

Die Dokumentation für diese Schnittstelle wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/ILayer.cs

6.7 NSA.Model.NetworkComponents.Interface Klassenreferenz

Öffentliche Methoden

• Interface (IPAddress Ip, IPAddress Mask, int Number)

Initializes a new instance of the Interface class.

Propertys

- string Name [get]
- IPAddress | [get, set]
- IPAddress Subnetmask [get, set]

6.7.1 Beschreibung der Konstruktoren und Destruktoren

6.7.1.1 NSA.Model.NetworkComponents.Interface.Interface (IPAddress Ip, IPAddress Mask, int Number)

Initializes a new instance of the Interface class.

Parameter

lp	The ip address of the interface.
Mask	The corresponding subnetmask.
Number	The number (e.g. 0 for eth0).

6.7.2 Dokumentation der Propertys

- **6.7.2.1 IPAddress NSA.Model.NetworkComponents.Interface.lpAddress** [get], [set]
- **6.7.2.2** string NSA.Model.NetworkComponents.Interface.Name [get]
- **6.7.2.3 IPAddress NSA.Model.NetworkComponents.Interface.Subnetmask** [get], [set]

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Interface.cs

6.8 NSA.Model.NetworkComponents.Helper_Classes.IPAddressExtensions Klassenreferenz

Öffentliche, statische Methoden

- static IPAddress GetBroadcastAddress (this IPAddress address, IPAddress subnetMask)
- static IPAddress GetNetworkAddress (this IPAddress address, IPAddress subnetMask)
- static bool IsInSameSubnet (this IPAddress address2, IPAddress address, IPAddress subnetMask)

6.8.1 Dokumentation der Elementfunktionen

- 6.8.1.1 static IPAddress NSA.Model.NetworkComponents.Helper_Classes.IPAddressExtensions.GetBroadcastAddress (this IPAddress address, IPAddress subnetMask) [static]
- 6.8.1.2 static IPAddress NSA.Model.NetworkComponents.Helper_Classes.IPAddressExtensions.GetNetworkAddress (this IPAddress address, IPAddress subnetMask) [static]
- 6.8.1.3 static bool NSA.Model.NetworkComponents.Helper_Classes.IPAddressExtensions.IsInSameSubnet (this IPAddress address2, IPAddress address, IPAddress subnetMask) [static]

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Helper Classes/IPAddressExtensions.cs

6.9 NSA.Model.NetworkComponents.Laverstack Klassenreferenz

Öffentliche Methoden

· Layerstack ()

Initializes a new instance of the Layerstack class.

void AddLayer (ILayer lay)

Adds a layer to the stack.

· void RemoveLayer (ILayer lay)

Removes a layer from the stack.

• int GetSize ()

Returns the size of the layerstack.

ILayer GetLayer (int index)

Returns the layer at the index.

- 6.9.1 Beschreibung der Konstruktoren und Destruktoren
- 6.9.1.1 NSA.Model.NetworkComponents.Layerstack.Layerstack ()

Initializes a new instance of the Layerstack class.

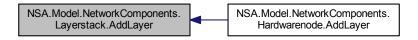
- 6.9.2 Dokumentation der Elementfunktionen
- 6.9.2.1 void NSA.Model.NetworkComponents.Layerstack.AddLayer (ILayer lay)

Adds a layer to the stack.

Parameter

lay The layer to be added.

Hier ist ein Graph der zeigt, wo diese Funktion aufgerufen wird:



6.9.2.2 ILayer NSA.Model.NetworkComponents.Layerstack.GetLayer (int index)

Returns the layer at the index.

Parameter

index The index.

Rückgabe

The layer

6.9.2.3 int NSA.Model.NetworkComponents.Layerstack.GetSize ()

Returns the size of the layerstack.

Rückgabe

The size

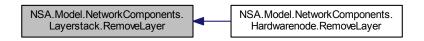
6.9.2.4 void NSA.Model.NetworkComponents.Layerstack.RemoveLayer (ILayer lay)

Removes a layer from the stack.

Parameter

	lay	The layer to be removed.
--	-----	--------------------------

Hier ist ein Graph der zeigt, wo diese Funktion aufgerufen wird:



Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Layerstack.cs

6.10 NSA.Model.NetworkComponents.Network Klassenreferenz

Öffentliche Methoden

- Network ()
- Hardwarenode GetHardwarenodeByName (string name)

Returns the Hardwarenode with the name.

• void AddHardwarenode (Hardwarenode newNode)

Adds a hardwarenode.

void AddConnection (Connection newConnection)

Adds a connection.

void RemoveHardwarnode (string name)

Removes the hardwarnode.

void RemoveConnection (string ConnectionName)

Removes the connection.

6.10.1 Beschreibung der Konstruktoren und Destruktoren

6.10.1.1 NSA.Model.NetworkComponents.Network.Network ()

6.10.2 Dokumentation der Elementfunktionen

6.10.2.1 void NSA.Model.NetworkComponents.Network.AddConnection (Connection newConnection)

Adds a connection.

Parameter

newConnection The n	ew connection.
-----------------------	----------------

Ausnahmebehandlung

System.InvalidOperationException	Connection already exists!
Cyclemina Cpcranon Exception	on the state of th

6.10.2.2 void NSA.Model.NetworkComponents.Network.AddHardwarenode (Hardwarenode newNode)

Adds a hardwarenode.

Parameter

newNode	The new node.

6.10.2.3 Hardwarenode NSA.Model.NetworkComponents.Network.GetHardwarenodeByName (string name)

Returns the Hardwarenode with the name.

Parameter

name	The name.
------	-----------

Rückgabe

The Hardwarenode with this name or default value

6.10.2.4 void NSA.Model.NetworkComponents.Network.RemoveConnection (string ConnectionName)

Removes the connection.

Parameter

ConnectionName	Name of the connection.
----------------	-------------------------

6.10.2.5 void NSA.Model.NetworkComponents.Network.RemoveHardwarnode (string name)

Removes the hardwarnode.

Parameter

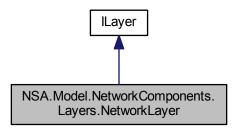
name The name.

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

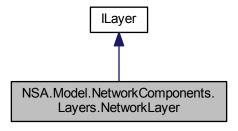
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Network.cs

6.11 NSA.Model.NetworkComponents.Layers.NetworkLayer Klassenreferenz

Klassendiagramm für NSA.Model.NetworkComponents.Layers.NetworkLayer:



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Layers.NetworkLayer:



Öffentliche Methoden

• bool ValidateReceive ()

Validates the layer while receiving a packet.

void ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

6.11.1 Dokumentation der Elementfunktionen

6.11.1.1 bool NSA.Model.NetworkComponents.Layers.NetworkLayer.ValidateReceive ()

Validates the layer while receiving a packet.

Rückgabe

Boolean value indicating if the validation was successfull

Implementiert NSA.Model.NetworkComponents.ILayer.

6.11.1.2 void NSA.Model.NetworkComponents.Layers.NetworkLayer.ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodelP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

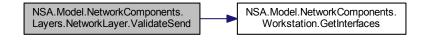
Validates the layer while sending a packet.

Rückgabe

null if not successfull or the next Hardwarenode if it was

Implementiert NSA.Model.NetworkComponents.ILayer.

Hier ist ein Graph, der zeigt, was diese Funktion aufruft:



Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Layers/NetworkLayer.cs

6.12 NSA.Model.BusinessLogic.Packet Klassenreferenz

Öffentliche Methoden

- Packet (Hardwarenode _source, Hardwarenode _destination, int _ttl, Dictionary< string, object > _tags)
- Packet Send ()

Sends this packet to the destination.

6.12.1 Beschreibung der Konstruktoren und Destruktoren

6.12.1.1 NSA.Model.BusinessLogic.Packet.Packet (Hardwarenode _source, Hardwarenode _destination, int _ttl, Dictionary< string, object > _tags)

6.12.2 Dokumentation der Elementfunktionen

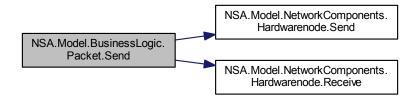
6.12.2.1 Packet NSA.Model.BusinessLogic.Packet.Send ()

Sends this packet to the destination.

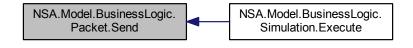
Rückgabe

The Returnpacket if sending to destination was successfull

Hier ist ein Graph, der zeigt, was diese Funktion aufruft:



Hier ist ein Graph der zeigt, wo diese Funktion aufgerufen wird:

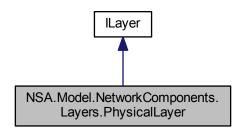


Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

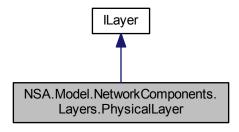
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Business
 Logic/Packet.cs

6.13 NSA.Model.NetworkComponents.Layers.PhysicalLayer Klassenreferenz

Klassendiagramm für NSA.Model.NetworkComponents.Layers.PhysicalLayer:



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Layers.PhysicalLayer:



Öffentliche Methoden

- bool ValidateReceive ()
 - Validates the layer while receiving a packet.
- void ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

6.13.1 Dokumentation der Elementfunktionen

6.13.1.1 bool NSA.Model.NetworkComponents.Layers.PhysicalLayer.ValidateReceive ()

Validates the layer while receiving a packet.

Rückgabe

Boolean value indicating if the validation was successfull

 $Implementiert\ NSA. Model. Network Components. I Layer.$

6.13.1.2 void NSA.Model.NetworkComponents.Layers.PhysicalLayer.ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodelP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

Rückgabe

null if not successfull or the next Hardwarenode if it was

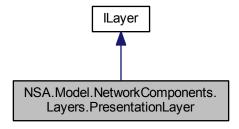
Implementiert NSA.Model.NetworkComponents.ILayer.

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

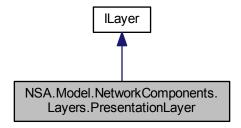
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Layers/PhysicalLayer.cs

6.14 NSA.Model.NetworkComponents.Layers.PresentationLayer Klassenreferenz

Klassendiagramm für NSA.Model.NetworkComponents.Layers.PresentationLayer:



 $\label{prop:components} Zusammengeh\"{o}rigkeiten\ von\ NSA. Model. Network Components. Layers. Presentation Layer:$



Öffentliche Methoden

• bool ValidateReceive ()

Validates the layer while receiving a packet.

void ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

6.14.1 Dokumentation der Elementfunktionen

6.14.1.1 bool NSA.Model.NetworkComponents.Layers.PresentationLayer.ValidateReceive ()

Validates the layer while receiving a packet.

Rückgabe

Boolean value indicating if the validation was successfull

Implementiert NSA.Model.NetworkComponents.ILayer.

6.14.1.2 void NSA.Model.NetworkComponents.Layers.PresentationLayer.ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodelP, ref string interfaceName, Workstation destination, Dictionary< string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

Rückgabe

null if not successfull or the next Hardwarenode if it was

Implementiert NSA.Model.NetworkComponents.ILayer.

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Layers/PresentationLayer.cs

6.15 NSA.Model.BusinessLogic.Project Klassenreferenz

Öffentliche Methoden

• Project ()

Initializes a new instance of the Project class.

6.15.1 Beschreibung der Konstruktoren und Destruktoren

6.15.1.1 NSA.Model.BusinessLogic.Project.Project ()

Initializes a new instance of the Project class.

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Business
 — Logic/Project.cs

6.16 NSA.Model.NetworkComponents.Route Klassenreferenz

Öffentliche Methoden

Route (IPAddress Destination, IPAddress Subnetmask, IPAddress Gateway, Interface Iface)
 Initializes a new instance of the Route class.

Propertys

- IPAddress Destination [get]
- IPAddress Subnetmask [get]
- IPAddress Gateway [get]
- Interface Iface [get]

6.16.1 Beschreibung der Konstruktoren und Destruktoren

6.16.1.1 NSA.Model.NetworkComponents.Route (IPAddress *Destination*, IPAddress *Subnetmask*, IPAddress *Gateway*, Interface *Iface*)

Initializes a new instance of the Route class.

Parameter

Destination	The Destination IP.
Subnetmask	The Mask.
Gateway	The Gateway.
Iface	The Interface to be used.

6.16.2 Dokumentation der Propertys

- **6.16.2.1** IPAddress NSA.Model.NetworkComponents.Route.Destination [get]
- **6.16.2.2 IPAddress NSA.Model.NetworkComponents.Route.Gateway** [get]

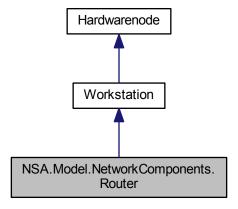
- **6.16.2.3 Interface NSA.**Model.NetworkComponents.Route.lface [get]
- **6.16.2.4** IPAddress NSA.Model.NetworkComponents.Route.Subnetmask [get]

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

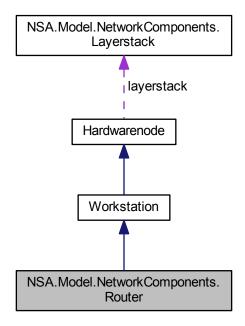
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Route.cs

6.17 NSA.Model.NetworkComponents.Router Klassenreferenz

 $Klassendiagramm\ f\"{u}r\ NSA. Model. Network Components. Router:$



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Router:



Öffentliche Methoden

• Router (string name)

Initializes a new instance of the Router class.

Propertys

• bool lsGateway [get, set]

Weitere Geerbte Elemente

6.17.1 Beschreibung der Konstruktoren und Destruktoren

6.17.1.1 NSA.Model.NetworkComponents.Router.Router (string name)

Initializes a new instance of the Router class.

Parameter

name The name.

6.17.2 Dokumentation der Propertys

6.17.2.1 bool NSA.Model.NetworkComponents.Router.lsGateway [get], [set]

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Router.cs

6.18 NSA.Model.NetworkComponents.Routingtable Klassenreferenz

Öffentliche Methoden

• void AddRoute (Route Route)

Adds a route to the table.

• void RemoveRoute (Route Route)

Removes a route from the table.

void RemoveRouteAtIndex (int Index)

Removes the route at the given index.

• int GetSize ()

Gets the size of the routingtable.

Route GetRouteAt (int Index)

Gets the route at the specified index.

6.18.1 Dokumentation der Elementfunktionen

6.18.1.1 void NSA.Model.NetworkComponents.Routingtable.AddRoute (Route Route)

Adds a route to the table.

Parameter

Route The route.

6.18.1.2 Route NSA.Model.NetworkComponents.Routingtable.GetRouteAt (int Index)

Gets the route at the specified index.

Parameter

Index The index.

Rückgabe

The route at the index

6.18.1.3 int NSA.Model.NetworkComponents.Routingtable.GetSize ()

Gets the size of the routingtable.

Rückgabe

The size

6.18.1.4 void NSA.Model.NetworkComponents.Routingtable.RemoveRoute (Route Route)

Removes a route from the table.

Parameter

6.18.1.5 void NSA.Model.NetworkComponents.Routingtable.RemoveRouteAtIndex (int Index)

Removes the route at the given index.

Parameter

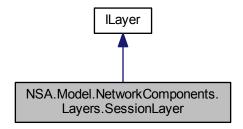
Index	The index.
-------	------------

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

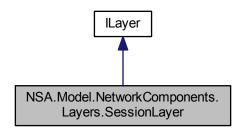
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Routingtable.cs

6.19 NSA.Model.NetworkComponents.Layers.SessionLayer Klassenreferenz

 $Klassendiagramm\ f\"{u}r\ NSA. Model. Network Components. Layers. Session Layer:$



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Layers.SessionLayer:



Öffentliche Methoden

• bool ValidateReceive ()

Validates the layer while receiving a packet.

void ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary< string, Connection > connections, Routingtable routingtable)
 Validates the layer while sending a packet.

6.19.1 Dokumentation der Elementfunktionen

6.19.1.1 bool NSA.Model.NetworkComponents.Layers.SessionLayer.ValidateReceive ()

Validates the layer while receiving a packet.

Rückgabe

Boolean value indicating if the validation was successfull

 $Implementiert\ NSA. Model. Network Components. I Layer.$

6.19.1.2 void NSA.Model.NetworkComponents.Layers.SessionLayer.ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodelP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

Rückgabe

null if not successfull or the next Hardwarenode if it was

Implementiert NSA.Model.NetworkComponents.ILayer.

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Layers/SessionLayer.cs

6.20 NSA.Model.BusinessLogic.Simulation Klassenreferenz

Öffentliche Methoden

- Simulation (string _id, bool _result)
- void AddPacketSend (Packet packet)

Adds the packet send.

• void Execute ()

Executes this instance.

6.20.1 Beschreibung der Konstruktoren und Destruktoren

6.20.1.1 NSA.Model.BusinessLogic.Simulation.Simulation (string _id, bool _result)

6.20.2 Dokumentation der Elementfunktionen

6.20.2.1 void NSA.Model.BusinessLogic.Simulation.AddPacketSend (Packet packet)

Adds the packet send.

Parameter

```
packet The packet.
```

6.20.2.2 void NSA.Model.BusinessLogic.Simulation.Execute ()

Executes this instance.

Hier ist ein Graph, der zeigt, was diese Funktion aufruft:

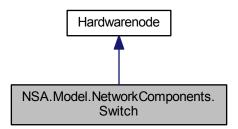


Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

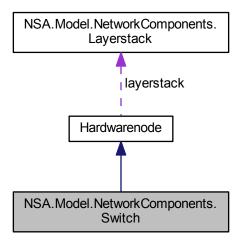
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Business
 — Logic/Simulation.cs

6.21 NSA.Model.NetworkComponents.Switch Klassenreferenz

 $Klassendiagramm\ f\"{u}r\ NSA. Model. Network Components. Switch:$



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Switch:



Öffentliche Methoden

• Switch (string name)

Initializes a new instance of the Switch class.

• List< string > GetInterfaces ()

Gets the interfaces.

• void AddInterface ()

Adds the interface.

• void RemoveInterface (string IfaceName)

Removes the interface.

Weitere Geerbte Elemente

6.21.1 Beschreibung der Konstruktoren und Destruktoren

6.21.1.1 NSA.Model.NetworkComponents.Switch.Switch (string name)

Initializes a new instance of the Switch class.

Parameter

name	The name of the switch.
------	-------------------------

6.21.2 Dokumentation der Elementfunktionen

6.21.2.1 void NSA.Model.NetworkComponents.Switch.AddInterface ()

Adds the interface.

6.21.2.2 List<string> NSA.Model.NetworkComponents.Switch.GetInterfaces ()

Gets the interfaces.

Rückgabe

The Interfaces

6.21.2.3 void NSA.Model.NetworkComponents.Switch.RemoveInterface (string IfaceName)

Removes the interface.

Parameter

IfaceName The name.

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Switch.cs

6.22 NSA.Model.BusinessLogic.Testscenario Klassenreferenz

Öffentliche Methoden

- Testscenario ()
- Testscenario (string id)

Propertys

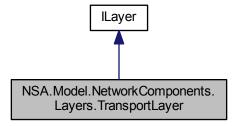
- string ld [get]
- 6.22.1 Beschreibung der Konstruktoren und Destruktoren
- 6.22.1.1 NSA.Model.BusinessLogic.Testscenario.Testscenario ()
- 6.22.1.2 NSA.Model.BusinessLogic.Testscenario.Testscenario (string id)
- 6.22.2 Dokumentation der Propertys
- **6.22.2.1** string NSA.Model.BusinessLogic.Testscenario.ld [get]

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

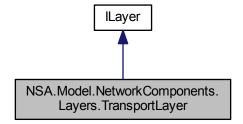
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Business
 — Logic/Testscenario.cs

6.23 NSA.Model.NetworkComponents.Layers.TransportLayer Klassenreferenz

Klassendiagramm für NSA.Model.NetworkComponents.Layers.TransportLayer:



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Layers.TransportLayer:



Öffentliche Methoden

• bool ValidateReceive ()

Validates the layer while receiving a packet.

 void ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodeIP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

6.23.1	Dokumentation der Elementfunktionen

6.23.1.1 bool NSA.Model.NetworkComponents.Layers.TransportLayer.ValidateReceive ()

Validates the layer while receiving a packet.

Rückgabe

Boolean value indicating if the validation was successfull

 $Implementiert\ NSA. Model. Network Components. I Layer.$

6.23.1.2 void NSA.Model.NetworkComponents.Layers.TransportLayer.ValidateSend (ref Hardwarenode nextNode, ref IPAddress nextNodelP, ref string interfaceName, Workstation destination, Dictionary < string, Connection > connections, Routingtable routingtable)

Validates the layer while sending a packet.

Rückgabe

null if not successfull or the next Hardwarenode if it was

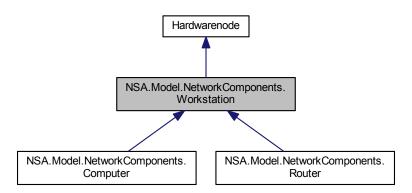
Implementiert NSA.Model.NetworkComponents.ILayer.

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

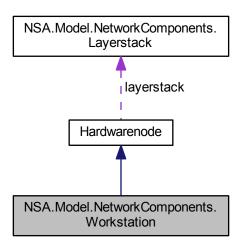
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Layers/TransportLayer.cs

6.24 NSA.Model.NetworkComponents.Workstation Klassenreferenz

 $Klassendiagramm\ f\"{u}r\ NSA. Model. Network Components. Work station:$



Zusammengehörigkeiten von NSA.Model.NetworkComponents.Workstation:



Öffentliche Methoden

- Workstation (string Name)
 - Initializes a new instance of the Workstation class. The IP address of the standardgateway must be set seperatly.
- List< Interface > GetInterfaces ()

Gets the interfaces.

• void AddInterface (Interface Iface)

Adds a new interface to the workstation

void RemoveInterface (Interface Iface)

Removes the given interface.

• void AddRoute (Route Route)

Adds the route.

• void RemoveRoute (Route Route)

Removes the route.

Route GetRouteAt (int Index)

Gets the routingtable entry at the given index.

int GetRouteCount ()

Gets number of route entries in the routing table.

override bool HasIP (IPAddress Ip)

Checks if the Hardwarenode has the IP

 override Hardwarenode Send (Hardwarenode Destination, ref Dictionary< string, object > Tags, ref string Result)

Hardwarenode sends the package to specified destination.

override bool Receive (ref Dictionary< string, object > Tags, ref string Result)

Hardwarenode receives the package.

Propertys

• IPAddress StandardGateway [get, set]

Weitere Geerbte Elemente

6.24.1 Beschreibung der Konstruktoren und Destruktoren

6.24.1.1 NSA.Model.NetworkComponents.Workstation.Workstation (string Name)

Initializes a new instance of the Workstation class. The IP address of the standardgateway must be set seperatly.

Parameter

Name	The Name.

6.24.2 Dokumentation der Elementfunktionen

6.24.2.1 void NSA.Model.NetworkComponents.Workstation.AddInterface (Interface Iface)

Adds a new interface to the workstation

Parameter

Iface	The iface.
-------	------------

6.24.2.2 void NSA.Model.NetworkComponents.Workstation.AddRoute (Route Route)

Adds the route.

Parameter

Route The route.

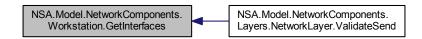
6.24.2.3 List<Interface> NSA.Model.NetworkComponents.Workstation.GetInterfaces ()

Gets the interfaces.

Rückgabe

The Interfaces

Hier ist ein Graph der zeigt, wo diese Funktion aufgerufen wird:



6.24.2.4 Route NSA.Model.NetworkComponents.Workstation.GetRouteAt (int Index)

Gets the routingtable entry at the given index.

Parameter

Index The index.

Rückgabe

The Route object at the given index.

6.24.2.5 int NSA.Model.NetworkComponents.Workstation.GetRouteCount ()

Gets number of route entries in the routing table.

Rückgabe

int: Number of route entries

6.24.2.6 override bool NSA.Model.NetworkComponents.Workstation.HaslP (IPAddress *lp*) [virtual]

Checks if the Hardwarenode has the IP

Parameter

lр	The ip.
----	---------

Rückgabe

bool: true if workstation has the ip, otherwise false

Erneute Implementation von NSA.Model.NetworkComponents.Hardwarenode.

6.24.2.7 override bool NSA.Model.NetworkComponents.Workstation.Receive (ref Dictionary < string, object > Tags, ref string Result) [virtual]

Hardwarenode receives the package.

Parameter

Tags	Optional tags.
Result	String representing the result

Rückgabe

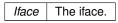
bool that indicates if the Hardwarenode received the package

Erneute Implementation von NSA.Model.NetworkComponents.Hardwarenode.

6.24.2.8 void NSA.Model.NetworkComponents.Workstation.RemoveInterface (Interface Iface)

Removes the given interface.

Parameter



6.24.2.9 void NSA.Model.NetworkComponents.Workstation.RemoveRoute (Route Route)

Removes the route.

Parameter

Route	The route.

6.24.2.10 override Hardwarenode NSA.Model.NetworkComponents.Workstation.Send (Hardwarenode *Destination*, ref Dictionary < string, object > Tags, ref string Result) [virtual]

Hardwarenode sends the package to specified destination.

Parameter

Destination	The destination.
Tags	Optional tags.
Result	String representing the result

Rückgabe

The Hardwarenode which received the package or null if an error occured

Erneute Implementation von NSA.Model.NetworkComponents.Hardwarenode.

6.24.3 Dokumentation der Propertys

6.24.3.1 IPAddress NSA.Model.NetworkComponents.Workstation.StandardGateway [get], [set]

Die Dokumentation für diese Klasse wurde erzeugt aufgrund der Datei:

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/NSA.Model/Network
 — Components/Workstation.cs

Kapitel 7

Datei-Dokumentation

7.1 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/
NSA.Model/BusinessLogic/Packet.cs-Dateireferenz

Klassen

· class NSA.Model.BusinessLogic.Packet

Namensbereiche

- namespace NSA.Model.BusinessLogic
- 7.2 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/BusinessLogic/Project.cs-Dateireferenz

Klassen

• class NSA.Model.BusinessLogic.Project

Namensbereiche

- namespace NSA.Model.BusinessLogic
- 7.3 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/
 NSA.Model/BusinessLogic/Simulation.cs-Dateireferenz

Klassen

• class NSA.Model.BusinessLogic.Simulation

52 Datei-Dokumentation

Namensbereiche

• namespace NSA.Model.BusinessLogic

7.4 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/
NSA.Model/BusinessLogic/Testscenario.cs-Dateireferenz

Klassen

class NSA.Model.BusinessLogic.Testscenario

Namensbereiche

- namespace NSA.Model.BusinessLogic
- 7.5 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Computer.cs-Dateireferenz

Klassen

· class NSA.Model.NetworkComponents.Computer

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.6 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Connection.cs-Dateireferenz

Klassen

· class NSA.Model.NetworkComponents.Connection

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.7 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/
 NSA.Model/NetworkComponents/Hardwarenode.cs-Dateireferenz

Klassen

class NSA.Model.NetworkComponents.Hardwarenode

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.8 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/← NSA.Model/NetworkComponents/Helper Classes/IPAddressExtensions.cs-Dateireferenz

Klassen

• class NSA.Model.NetworkComponents.Helper_Classes.IPAddressExtensions

Namensbereiche

- namespace NSA.Model.NetworkComponents.Helper_Classes
- 7.9 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/ILayer.cs-Dateireferenz

Klassen

interface NSA.Model.NetworkComponents.ILayer

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.10 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Interface.cs-Dateireferenz

Klassen

• class NSA.Model.NetworkComponents.Interface

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.11 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/
 NSA.Model/NetworkComponents/Layers/ApplicationLayer.cs-Dateireferenz

Klassen

class NSA.Model.NetworkComponents.Layers.ApplicationLayer

54 Datei-Dokumentation

Namensbereiche

namespace NSA.Model.NetworkComponents.Layers

7.12 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

NSA.Model/NetworkComponents/Layers/DataLinkLayer.cs-Dateireferenz

Klassen

· class NSA.Model.NetworkComponents.Layers.DataLinkLayer

Namensbereiche

- namespace NSA.Model.NetworkComponents.Layers
- 7.13 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Layers/NetworkLayer.cs-Dateireferenz

Klassen

· class NSA.Model.NetworkComponents.Layers.NetworkLayer

Namensbereiche

- namespace NSA.Model.NetworkComponents.Layers
- 7.14 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/
 NSA.Model/NetworkComponents/Layers/PhysicalLayer.cs-Dateireferenz

Klassen

· class NSA.Model.NetworkComponents.Layers.PhysicalLayer

Namensbereiche

- namespace NSA.Model.NetworkComponents.Layers
- 7.15 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Layers/PresentationLayer.cs-Dateireferenz

Klassen

class NSA.Model.NetworkComponents.Layers.PresentationLayer

Namensbereiche

- namespace NSA.Model.NetworkComponents.Layers
- 7.16 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Layers/SessionLayer.cs-Dateireferenz

Klassen

class NSA.Model.NetworkComponents.Layers.SessionLayer

Namensbereiche

- namespace NSA.Model.NetworkComponents.Layers
- 7.17 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Layers/TransportLayer.cs-Dateireferenz

Klassen

· class NSA.Model.NetworkComponents.Layers.TransportLayer

Namensbereiche

- namespace NSA.Model.NetworkComponents.Layers
- 7.18 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Layerstack.cs-Dateireferenz

Klassen

· class NSA.Model.NetworkComponents.Layerstack

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.19 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Network.cs-Dateireferenz

Klassen

class NSA.Model.NetworkComponents.Network

56 Datei-Dokumentation

Namensbereiche

namespace NSA.Model.NetworkComponents

7.20 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

NSA.Model/NetworkComponents/Route.cs-Dateireferenz

Klassen

• class NSA.Model.NetworkComponents.Route

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.21 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Router.cs-Dateireferenz

Klassen

· class NSA.Model.NetworkComponents.Router

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.22 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/← NSA.Model/NetworkComponents/Routingtable.cs-Dateireferenz

Klassen

• class NSA.Model.NetworkComponents.Routingtable

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.23 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Switch.cs-Dateireferenz

Klassen

class NSA.Model.NetworkComponents.Switch

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.24 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/NetworkComponents/Workstation.cs-Dateireferenz

Klassen

• class NSA.Model.NetworkComponents.Workstation

Namensbereiche

- namespace NSA.Model.NetworkComponents
- 7.25 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/
 NSA.Model/obj/Debug/TemporaryGeneratedFile_036C0B5B-1481-4323-8D20-8F5A
 DCB23D92.cs-Dateireferenz
- 7.26 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/obj/Debug/TemporaryGeneratedFile_5937a670-0e60-4077-877b-f7221da3dda1.cs
 Dateireferenz
- 7.27 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/

 NSA.Model/obj/Debug/TemporaryGeneratedFile_E7A71F73-0F8D-4B9B-B56E-8

 E70B10BC5D3.cs-Dateireferenz
- 7.28 C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/NetworkSimulatorAnalyzer/
 NSA.Model/Properties/AssemblyInfo.cs-Dateireferenz

58 Datei-Dokumentation

Index

AddConnection	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/{\hookleftarrow}$
NSA::Model::NetworkComponents::Hardwarenode,	NetworkSimulatorAnalyzer/NSA.Model/←
18	NetworkComponents/Interface.cs, 53
NSA::Model::NetworkComponents::Network, 26	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/{\hookleftarrow}$
AddHardwarenode	$NetworkSimulatorAnalyzer/NSA.Model/{\leftarrow}$
NSA::Model::NetworkComponents::Network, 27	NetworkComponents/Layers/Application ←
AddInterface	Layer.cs, 53
NSA::Model::NetworkComponents::Switch, 42	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/{\hookleftarrow}$
NSA::Model::NetworkComponents::Workstation,	$NetworkSimulatorAnalyzer/NSA.Model/{\leftarrow}$
46	NetworkComponents/Layers/DataLink←
AddLayer	Layer.cs, 54
NSA::Model::NetworkComponents::Hardwarenode,	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/ \hookleftarrow$
18	$NetworkSimulatorAnalyzer/NSA.Model/{\leftarrow}$
NSA::Model::NetworkComponents::Layerstack, 25	NetworkComponents/Layers/NetworkLayer. ←
AddPacketSend	cs, 54
NSA::Model::BusinessLogic::Simulation, 40	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/ \hookleftarrow$
AddRoute	$NetworkSimulatorAnalyzer/NSA.Model/{\leftarrow}$
NSA::Model::NetworkComponents::Routingtable,	NetworkComponents/Layers/PhysicalLayer. ←
NSAuMadaluNatuarkComponentaulMarketation	cs, 54
NSA::Model::NetworkComponents::Workstation,	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/{\hookleftarrow}$
40	$Network Simulator Analyzer/NSA. Model/{\hookleftarrow}$
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/	NetworkComponents/Layers/Presentation ←
NetworkSimulatorAnalyzer/NSA.Model/←	Layer.cs, 54
BusinessLogic/Packet.cs, 51	$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/ \hookleftarrow$
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/←	NetworkSimulatorAnalyzer/NSA.Model/←
NetworkSimulatorAnalyzer/NSA.Model/←	NetworkComponents/Layers/SessionLayer. ←
BusinessLogic/Project.cs, 51	cs, 55
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/←
NetworkSimulatorAnalyzer/NSA.Model/←	NetworkSimulatorAnalyzer/NSA.Model/←
BusinessLogic/Simulation.cs, 51	NetworkComponents/Layers/Transport ←
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/	Layer.cs, 55
NetworkSimulatorAnalyzer/NSA.Model/←	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/←
BusinessLogic/Testscenario.cs, 52	NetworkSimulatorAnalyzer/NSA.Model/←
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/ \!$	NetworkComponents/Layerstack.cs, 55
NetworkSimulatorAnalyzer/NSA.Model/←	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/←
NetworkComponents/Computer.cs, 52	NetworkSimulatorAnalyzer/NSA.Model/←
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/{\hookleftarrow}$	NetworkComponents/Network.cs, 55
$Network Simulator Analyzer/NSA. Model/{\hookleftarrow}$	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/←
NetworkComponents/Connection.cs, 52	NetworkSimulatorAnalyzer/NSA.Model/←
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/{\hookleftarrow}$	
NetworkSimulatorAnalyzer/NSA.Model/←	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/←
NetworkComponents/Hardwarenode.cs, 52	NetworkSimulatorAnalyzer/NSA.Model/←
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/{\hookleftarrow}$	
NetworkSimulatorAnalyzer/NSA.Model/←	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/ →
NetworkComponents/Helper Classes/IP←	NetworkSimulatorAnalyzer/NSA.Model/←
AddressExtensions.cs, 53	NetworkComponents/Routingtable.cs, 56
_ ·	C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/←
NetworkSimulatorAnalyzer/NSA.Model/←	NetworkSimulatorAnalyzer/NSA.Model/←
NetworkComponents/ILayer.cs, 53	NetworkComponents/Switch.cs, 56

60 INDEX

C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/← NetworkSimulatorAnalyzer/NSA.Model/← NetworkComponents/Workstation.cs, 57	NSA::Model::NetworkComponents::Routingtable, 37
$C:/SWP16/Basis verzeichnis/trunk/03_Implementierung/\leftarrow$	
NetworkSimulatorAnalyzer/NSA.Model/←	Hardwarenode
Properties/AssemblyInfo.cs, 57	NSA::Model::NetworkComponents::Hardwarenode,
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/	. 18
NetworkSimulatorAnalyzer/NSA.Model/obj/←	HasIP
Debug/TemporaryGeneratedFile 036C0B5B-	NSA::Model::NetworkComponents::Hardwarenode,
1481-4323-8D20-8F5ADCB23D92.cs, 57	19
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/	NSA::Model::NetworkComponents::Workstation,
NetworkSimulatorAnalyzer/NSA.Model/obj/←	47
Debug/TemporaryGeneratedFile_5937a670-	
0e60-4077-877b-f7221da3dda1.cs, 57	ld
C:/SWP16/Basisverzeichnis/trunk/03_Implementierung/	NSA::Model::BusinessLogic::Testscenario, 43
NetworkSimulatorAnalyzer/NSA.Model/obj/←	Iface
Debug/TemporaryGeneratedFile_E7A71F73-	NSA::Model::NetworkComponents::Route, 34
0F8D-4B9B-B56E-8E70B10BC5D3.cs, 57	Interface
Computer	NSA::Model::NetworkComponents::Interface, 23
NSA::Model::NetworkComponents::Computer, 14	IpAddress
Connection	NSA::Model::NetworkComponents::Interface, 24
NSA::Model::NetworkComponents::Connection, 14	IsGateway
connections	NSA::Model::NetworkComponents::Router, 37
	IsInSameSubnet
NSA::Model::NetworkComponents::Hardwarenode,	NSA::Model::NetworkComponents::Helper_←
21	Classes::IPAddressExtensions, 24
Destination	Classes radioseExtensione, E1
NSA::Model::NetworkComponents::Route, 34	Layerstack
Tron till voldo i i rotto i rotto, o r	NSA::Model::NetworkComponents::Layerstack, 25
End	layerstack
NSA::Model::NetworkComponents::Connection, 14	NSA::Model::NetworkComponents::Hardwarenode,
1	•
Execute	21
Execute NSA::Model::BusinessLogic::Simulation, 40	21
	NSA.Model, 9
NSA::Model::BusinessLogic::Simulation, 40	NSA.Model, 9
NSA::Model::BusinessLogic::Simulation, 40 Gateway	NSA.Model, 9 NSA.Model.BusinessLogic, 9
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP AddressExtensions, 24
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP AddressExtensions, 24 NSA.Model.NetworkComponents.ILayer, 22
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP AddressExtensions, 24 NSA.Model.NetworkComponents.ILayer, 22 NSA.Model.NetworkComponents.Interface, 23
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP←
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP← AddressExtensions, 24 NSA.Model.NetworkComponents.ILayer, 22 NSA.Model.NetworkComponents.Interface, 23 NSA.Model.NetworkComponents.Layers, 10 NSA.Model.NetworkComponents.Layers, 10 NSA.Model.NetworkComponents.Layers.Application←
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP AddressExtensions, 24 NSA.Model.NetworkComponents.ILayer, 22 NSA.Model.NetworkComponents.Interface, 23 NSA.Model.NetworkComponents.Layers, 10 NSA.Model.NetworkComponents.Layers, 10 NSA.Model.NetworkComponents.Layers.Application Layer, 11
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP AddressExtensions, 24 NSA.Model.NetworkComponents.ILayer, 22 NSA.Model.NetworkComponents.Interface, 23 NSA.Model.NetworkComponents.Layers, 10 NSA.Model.NetworkComponents.Layers.Application Layer, 11 NSA.Model.NetworkComponents.Layers.DataLink □
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP AddressExtensions, 24 NSA.Model.NetworkComponents.ILayer, 22 NSA.Model.NetworkComponents.Interface, 23 NSA.Model.NetworkComponents.Layers, 10 NSA.Model.NetworkComponents.Layers.Application Layer, 11 NSA.Model.NetworkComponents.Layers.DataLink Layer, 15
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP←
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP←
NSA::Model::BusinessLogic::Simulation, 40 Gateway NSA::Model::NetworkComponents::Route, 34 GetBroadcastAddress NSA::Model::NetworkComponents::Helper_←	NSA.Model, 9 NSA.Model.BusinessLogic, 9 NSA.Model.BusinessLogic.Packet, 29 NSA.Model.BusinessLogic.Project, 33 NSA.Model.BusinessLogic.Simulation, 40 NSA.Model.BusinessLogic.Testscenario, 42 NSA.Model.NetworkComponents, 9 NSA.Model.NetworkComponents.Computer, 13 NSA.Model.NetworkComponents.Connection, 14 NSA.Model.NetworkComponents.Hardwarenode, 17 NSA.Model.NetworkComponents.Helper_Classes, 10 NSA.Model.NetworkComponents.Helper_Classes.IP ←

INDEX 61

NSA.Model.NetworkComponents.Layers.SessionLayer, 38	ValidateSend, 12 NSA::Model::NetworkComponents::Layers::DataLink↔
NSA.Model.NetworkComponents.Layers.Transport←	Layer
Layer, 43	ValidateReceive, 16
NSA.Model.NetworkComponents.Layerstack, 24	ValidateSend, 16
NSA.Model.NetworkComponents.Network, 26	NSA::Model::NetworkComponents::Layers::Network↔
NSA.Model.NetworkComponents.Route, 34	Layer
NSA.Model.NetworkComponents.Router, 35	ValidateReceive, 29
NSA.Model.NetworkComponents.Routingtable, 37	ValidateSend, 29
NSA.Model.NetworkComponents.Switch, 41	NSA::Model::NetworkComponents::Layers::Physical ←
NSA.Model.NetworkComponents.Workstation, 45	Layer
NSA::Model::BusinessLogic::Packet	ValidateReceive, 31
Packet, 30	ValidateSend, 31
Send, 30	NSA::Model::NetworkComponents::Layers::Presentation
NSA::Model::BusinessLogic::Project	Layer
Project, 34	ValidateReceive, 33
NSA::Model::BusinessLogic::Simulation	ValidateSend, 33
AddPacketSend, 40	NSA::Model::NetworkComponents::Layers::Session ←
Execute, 40	Layer
Simulation, 40	ValidateReceive, 39
NSA::Model::BusinessLogic::Testscenario	ValidateSend, 39
	NSA::Model::NetworkComponents::Layers::Transport←
ld, 43	
Testscenario, 43	Layer ValidateReceive, 44
NSA::Model::NetworkComponents::Computer	
Computer, 14	ValidateSend, 44
NSA::Model::NetworkComponents::Connection	NSA::Model::NetworkComponents::Layerstack
Connection, 14	AddLayer, 25
End, 14	GetLayer, 25
Name, 15	GetSize, 25
Start, 15	Layerstack, 25
NSA::Model::NetworkComponents::Hardwarenode	RemoveLayer, 25
AddConnection, 18	NSA::Model::NetworkComponents::Network
AddLayer, 18	AddConnection, 26
connections, 21	AddHardwarenode, 27
Hardwarenode, 18	GetHardwarenodeByName, 27
HasIP, 19	Network, 26
layerstack, 21	RemoveConnection, 27
Name, 21	RemoveHardwarnode, 27
Receive, 19	NSA::Model::NetworkComponents::Route
RemoveConnection, 19	Destination, 34
RemoveLayer, 20	Gateway, 34
Send, 20	Iface, 34
$NSA::Model::NetworkComponents::Helper_Classes::I \hookleftarrow$	Route, 34
PAddressExtensions	Subnetmask, 35
GetBroadcastAddress, 24	NSA::Model::NetworkComponents::Router
GetNetworkAddress, 24	IsGateway, 37
IsInSameSubnet, 24	Router, 36
NSA::Model::NetworkComponents::ILayer	NSA::Model::NetworkComponents::Routingtable
ValidateReceive, 22	AddRoute, 37
ValidateSend, 22	GetRouteAt, 37
NSA::Model::NetworkComponents::Interface	GetSize, 37
Interface, 23	RemoveRoute, 38
IpAddress, 24	RemoveRouteAtIndex, 38
Name, 24	NSA::Model::NetworkComponents::Switch
Subnetmask, 24	AddInterface, 42
NSA::Model::NetworkComponents::Layers::Application ←	GetInterfaces, 42
Layer	RemoveInterface, 42
ValidateReceive, 12	Switch, 42
randator tootivo, 12	Cinton, 12

62 INDEX

NSA::Model::NetworkComponents::Workstation	Send
AddInterface, 46	NSA::Model::BusinessLogic::Packet, 30
AddRoute, 46	NSA::Model::NetworkComponents::Hardwarenode,
GetInterfaces, 47	20
GetRouteAt, 47	NSA::Model::NetworkComponents::Workstation,
GetRouteCount, 47	49
HasIP, 47	Simulation
Receive, 48	NSA::Model::BusinessLogic::Simulation, 40
RemoveInterface, 48	StandardGateway
RemoveRoute, 48	NSA::Model::NetworkComponents::Workstation,
Send, 49	49
StandardGateway, 49	Start
Workstation, 46	NSA::Model::NetworkComponents::Connection, 15
NSA, 9	Subnetmask
Name	NSA::Model::NetworkComponents::Interface, 24
NSA::Model::NetworkComponents::Connection, 15	NSA::Model::NetworkComponents::Route, 35
NSA::Model::NetworkComponents::Hardwarenode,	Switch
21	NSA::Model::NetworkComponents::Switch, 42
NSA::Model::NetworkComponents::Interface, 24	
Network	Testscenario
NSA::Model::NetworkComponents::Network, 26	NSA::Model::BusinessLogic::Testscenario, 43
	ValidateReceive
Packet	NSA::Model::NetworkComponents::ILayer, 22
NSA::Model::BusinessLogic::Packet, 30	NSA::Model::NetworkComponents::Layers::←
Project	ApplicationLayer, 12
NSA::Model::BusinessLogic::Project, 34	NSA::Model::NetworkComponents::Layers::Data ←
	LinkLayer, 16
Receive	NSA::Model::NetworkComponents::Layers::←
NSA::Model::NetworkComponents::Hardwarenode,	NetworkLayer, 29
19	NSA::Model::NetworkComponents::Layers::←
NSA::Model::NetworkComponents::Workstation,	PhysicalLayer, 31
48	NSA::Model::NetworkComponents::Layers::←
RemoveConnection	PresentationLayer, 33
NSA::Model::NetworkComponents::Hardwarenode,	NSA::Model::NetworkComponents::Layers::←
19	SessionLayer, 39
NSA::Model::NetworkComponents::Network, 27	NSA::Model::NetworkComponents::Layers::←
RemoveHardwarnode	TransportLayer, 44
NSA::Model::NetworkComponents::Network, 27	ValidateSend
RemoveInterface	NSA::Model::NetworkComponents::ILayer, 22
NSA::Model::NetworkComponents::Switch, 42	NSA::Model::NetworkComponents::Layers::←
NSA::Model::NetworkComponents::Workstation,	ApplicationLayer, 12
48	NSA::Model::NetworkComponents::Layers::Data ←
RemoveLayer	LinkLayer, 16
NSA::Model::NetworkComponents::Hardwarenode,	$NSA::Model::NetworkComponents::Layers:: \leftarrow$
20	NetworkLayer, 29
NSA::Model::NetworkComponents::Layerstack, 25	NSA::Model::NetworkComponents::Layers::←
RemoveRoute	PhysicalLayer, 31
NSA::Model::NetworkComponents::Routingtable,	NSA::Model::NetworkComponents::Layers::←
38	PresentationLayer, 33
NSA::Model::NetworkComponents::Workstation,	NSA::Model::NetworkComponents::Layers::←
48	SessionLayer, 39
RemoveRouteAtIndex	$NSA::Model::NetworkComponents::Layers::\hookleftarrow$
NSA:: Model:: Network Components:: Routing table,	TransportLayer, 44
38	W. J. v.
Route	Workstation
NSA::Model::NetworkComponents::Route, 34	NSA::Model::NetworkComponents::Workstation,
Router	46
NSA::Model::NetworkComponents::Router, 36	