

CURRICULUM VITAE

CARLOS MARCELO MARTÍNEZ

PERSONAL DATA AND CONTACT INFORMATION

Full Name: Carlos Marcelo Martínez Cagnazzo
Place of Birth: Montevideo, Uruguay
Date of Birth: November 30th, 1971
Citizenship: Italian / Uruguayan
Phone Numbers: +598-9-924-5009 (mobile)
+598-2-487-5885 (home)
E-mail Address: carlosmarcelomartinez@gmail.com
carlos.martinez@csirt-antel.com.uy

PROFESSIONAL PROFILE

I am a dedicated, goal-oriented professional who enjoys technical challenges. My key expertise areas are Networking and Computer Security but I am an avid learner, grasping new technologies with ease.

I perform equally well as a team member, leader or independent professional. I have very good communication and presentation skills which I have developed in the past five years giving talks not only in my country but overseas as well.

I have also proven myself under pressure in different opportunities and situations.

KEY EXPERIENCE

I have more than ten years of experience in a technologically diverse, Telco-centric environment. During this period, I have been in charge of (a) network engineering, operating a network of more than two hundred routers and layer two switches, (b) inter domain routing, planning and deploying network peerings with other Telcos and providers, (c) network management systems (including the development custom, business-process dependent software) and (d) network security assurance.

In this role as a network support and operation engineer I have proven myself as a reliable, dedicated professional with the planning and leadership skills needed to perform critical network maintenance tasks like migrations, critical device software and hardware upgrades and the like.

Recently I have been working as the technical leader of a *Computer Security Incident Response Team (CSIRT)* where I have helped develop a network-wide early warning system based on *honeypots* and other traffic monitoring devices that has been successfully employed to detect *malware* outbreaks and other security breaches.

Parallel to this I hold a position as *Assistant Professor* at the School of Engineering of the *Universidad de la República* in Montevideo, Uruguay where I have taught courses on Computer Networking, Network Management and Computer Security and worked on research projects on the same areas.

ACADEMIC FORMATION

Degree:	Electrical Engineering (6 yrs. Degree) Universidad de la República Montevideo, Uruguay
Master's Degree:	<i>MsC Candidate in Electrical Engineering</i> Universidad de la República Montevideo, Uruguay

LANGUAGE SKILLS

Spanish:	Mother tongue.
English:	Excellent reading and writing skills. Excellent oral communication skills.

PAST AND CURRENT POSITIONS

<i>Network Engineer</i> 1999-2003 Anteldata Uruguay	<p>During this period I held the position of <i>Network Engineer</i> at the O&M department where I was responsible of different projects and tasks on the company's infrastructure, which is largely Cisco and Alcatel-based. These included, among others:</p> <ul style="list-style-type: none">• provisioning international Internet links (BGP4) with other carriers;• configuring the internal switched LAN and internal routing plan (EIGRP, iBGP, OSPF, IS-IS);• configuring and maintaining network management systems including the development of custom software extending NMS systems and connecting to OSS systems;• configuring and maintaining a server farm including a e-mail server cluster and AAA servers;• configuring and maintaining PIX firewalls and Cisco routers to implement security policies
<i>Network Planning Lead</i> 2003-Today Anteldata Uruguay	<p>During this period I worked as a <i>Network Planning Lead</i>. My responsibilities included, among others:</p> <ul style="list-style-type: none">• Technical planning of ANTEL's Internet backbone• Negotiate and manage peering agreements for Internet traffic

	<p>exchange (BGP)</p> <ul style="list-style-type: none"> • Recommend and monitor the implementation of network-wide security policies • Equipment procurement including managing vendor relations
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<p><i>Technical Lead – CSIRT ANTEL</i> 2006-Today</p>	<p>Since 2006 I have been doubling as Technical Lead for the company’s new CSIRT (<i>Computer Security Incident Response Team</i>). Besides working on incident response and coordination, I have been involved in the following projects and areas of knowledge:</p> <ul style="list-style-type: none"> • Creation of a policy and procedures body • Installation of honeypots and spam traps • Development of an <i>Early Warning System</i> to provide intelligence about network-based attacks • Computer Forensics • DNS Security • Software quality testing • Web site penetration testing
<p>2001-Today Universidad de la República School of Engineering Uruguay</p>	<p>Since 2001, in addition to working as a researcher, I have taught at the School of Engineering the following courses:</p> <ul style="list-style-type: none"> • “<i>Introduction to Computer Networks</i>” (undergraduate course) • “<i>Network Management</i>” (for graduate students) • “<i>Advanced Systems’ Architecture</i>” (undergraduate course with some graduate students) <p>Additionally, I have also been thesis director for undergraduate students.</p>
<p>2003-Today Independent Consultant Uruguay</p>	<p>Since the year 2003 I have worked on several projects as an independent consultant.</p>
<p>2007-Today Universidad de Montevideo School of Engineering</p>	<p>I teach a a one-semester course for undergraduate students on “Computer Security” for the School of Engineering of the Universidad de Montevideo (http://www.um.edu.uy/)</p>

PROFESSIONAL CERTIFICATIONS

<p>ISC(2) CISSP</p>	<p><i>Certified Information Systems Security Professional</i> CISSP ID 333457</p>
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CISCO CCNA	<i>Cisco Certified Network Associate</i> <i>CCNA ID CSC010162251</i>
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PAST RESEARCH AND PUBLICATIONS

Papers and other publications	
2006	“ <i>Some Considerations on the Design of Multiservice Backbone Networks</i> ” In Spanish, Telcom2006, Montevideo, Uruguay
2006	“ <i>An Introduction to Flow-Aware Networking</i> ” In Spanish, Telcom2006, Montevideo, Uruguay
2006	“ <i>CERT.ny – Hacia un CSIRT Nacional</i> ” In Spanish, Telcom2006, Montevideo, Uruguay
2003	“ <i>A Real World Example of a Distributed E-mail System</i> ” CITA2003, Montevideo, Uruguay
1998	“ <i>Nonlinear Joint Transform Correlator Using One-dimensional Fourier Transformation</i> ” Optical Engineering 37 (10) (1998) 2742

Past Research	
2005 ANTEL U. de la República Uruguay	Creation of <i>Computer Security Incident Response Teams (CSIRTs)</i> (5) (6) including methodology, procedural and management aspects.
2004 INRIA France	“ <i>Modeling of a TCP/IP Network Stack in the Synchronous Language SIGNAL</i> ” Internship in IRISA / INRIA, ESPRESSO Team ¹ Director: Jean-Pierre Talpin Université de Rennes 1, Rennes, France

¹ ESPRESSO Team: <http://www.irisa.fr/activity/research/espresso>

<p>2001-2004 U. de la República Uruguay</p>	<p>Research topics during this period included:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Network management <ul style="list-style-type: none"> o Implementation of components of the TMN management architecture for IP networks. o Offline path computation architectures (7; 8) <input type="checkbox"/> Alternative quality of service approaches <ul style="list-style-type: none"> o Flow-Aware Networking (4) <input type="checkbox"/> Design of large-scale IP backbone networks
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PAST PROFESSIONAL EXPERIENCE

<p>2003-2005</p>	<p><i>Planning Engineer at ANTEL Uruguay</i></p> <p>During this period I worked as a <i>Planning Engineer</i>. My responsibilities included:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Technical planning of ANTEL's Internet backbone <input type="checkbox"/> Peering agreements for Internet traffic exchange (BGP) <input type="checkbox"/> Network-wide security <input type="checkbox"/> Equipment procurement
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1998-2003	<p><i>Network Support Specialist at ANTEL Uruguay</i></p> <p>During this period I worked as an operation and maintenance engineer for the Internet Service Provider Division of ANTEL. My responsibilities included:</p> <ul style="list-style-type: none"> □ Management and configuration of IP addressing and routing in the local backbone. □ Management and configuration of peering agreements with upstream service providers using BGP4. □ Management and configuration of the Ethernet switching backbone including the internal <i>spanning tree</i> design. □ Management of critical infrastructure: <ul style="list-style-type: none"> ○ Distributed E-mail System including servers, load balancers, Ethernet switches and storage arrays. ○ RADIUS AAA (Authorization, Authentication, Accounting) servers ○ Network management systems including, HP OpenView as well as in-house-developed systems. ○ Development of custom network management software using SNMP as data exchange protocol. ○ <i>Syslog</i> servers ○ DNS servers
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CONFERENCES, LECTURES AND SEMINARS

2009	<p>Chair of the 4to Evento de Seguridad en Redes para América Latina y el Caribe (LACSEC), LACNIC XII</p> <p>Panama City, Panama</p>
2009	<p>LACNIC XII, talk: "<i>Fast Flux Service Networks</i>"</p> <p>Panama City, Panama</p>
2009	<p>Workshop: "<i>Advanced Workshop on the Creation and Management of Computer Security Incident Response Teams</i>", organized by the Organization of American States (OAS)</p> <p>Trainer</p> <p>Santiago de Chile, Chile</p>
2009	<p>Workshop: "<i>Advanced Workshop on the Creation and Management of Computer Security Incident Response Teams</i>", organized by the Organization of American States (OAS)</p> <p>Trainer</p> <p>San José, Costa Rica</p>

2008	Conference: CSIRTUY 2008 – <i>First Uruguayan Workshop on the Creation of Computer Security Incident Response Teams</i> . Trainer Montevideo, Uruguay
2008	Talk: “ <i>Fast Flux Service Networks</i> ” FIRST ² Technical Colloquium Montevideo, Uruguay November 2008
2008	Talk: “ <i>A Survey on Languages, Enumerations and Other Tools used for Security Information Communication and Sharing</i> ” LACNIC ³ XI, Salvador, Brazil May 2008
2007	Talk: “ <i>Learning from the Enemy</i> ” http://www.csirt-antel.com.uy/main/eventos.html ANTEL Internet Security Conference
2007	Chair of the “Segundo Evento de Seguridad en Redes para América Latina y el Caribe” (<i>Second Latin American and the Caribbean Network Security Conference</i>) LACNIC ⁶ X: http://lacnic.net/sp/eventos/lacnicx/ Isla Margarita, Venezuela
2007	Talk: “ <i>Creation of a Computer Security Incident Response Team in ANTEL Uruguay</i> ” Conference “IIT: <i>Internacional Internet Technologies</i> ” http://www.internetmeeting.com.ar/ Buenos Aires, Argentina
2006	Talk: “ <i>Computer Security Incident Response Teams</i> ” ANTEL – Internal security awareness training
2006	Talk: “ <i>Security in a Service Provider’s Network</i> ” Desafío 2007 – ANTEL’s Annual Technology Conference http://www.antel.com.uy/desafio2007/
2005	Talk: “ <i>Implementing IPv6 in a Service Provider’s Network</i> ” LACNIC’s “IPv6 Tour” http://lacnic.net/ipv6tour/sp/montevideo.html

² FIRST is the *Forum of Incident Response and Security Teams*, an international organization that groups security and incident response teams (<http://www.first.org>)

³ LACNIC is the *Latin American and the Caribbean Network Information Center*. LACNIC handles Internet numbering resources for the LAC region and sponsors different academic activities throughout Latin America.

2005	Seminar: “ <i>Advanced IP Routing</i> ” ANTEL internal course
2005	Talk: “ <i>A New Generation in Datacomm Services: Metro Ethernet</i> ” Desafío 2006 – ANTEL’s Annual Technology Conference http://www.antel.com.uy/desafio2006/
2003	Talk: “ <i>ANTEL’s NAP: UruguayNet</i> ” NAPLA 2003: http://www.napla2003.com.ar Buenos Aires, Argentina

PROFESSIONAL FORMATION

2007	(ISC)2 CISSP Training DataSec Montevideo, Uruguay
2007	“ <i>CSIRT Information Security for Technical Staff</i> ” Carnegie-Mellon University certified course CERT.br, Sao Paulo, Brazil
2005	“ <i>CSIRT Creating Computer Security Emergency Response Teams</i> ” Carnegie-Mellon University certified course CERT.br, Sao Paulo, Brazil
2005	“ <i>CSIRT Advanced Incident Handling for Technical Staff</i> ” Carnegie-Mellon University certified course CERT.br, Sao Paulo, Brazil
2002	“ <i>SunCluster 3.0 Administration and Configuration</i> ” Sun Educational Services, Montevideo, Uruguay
2002	“ <i>Administering Sun Solaris Security</i> ” Sun Educational Services, Montevideo, Uruguay
2001	“ <i>Introduction to HP OpenView and CiscoWorks 2000</i> ” Montevideo, Uruguay
2001	“ <i>Cisco OSPF/BGP4 Seminar</i> ” Cisco Systems certified course IBM Educational Services, Montevideo, Uruguay
2001	“ <i>Alcatel 7400 Broadband Access Server</i> ” Montevideo, Uruguay

2001	" <i>Alteon WebSwitch Configuration</i> " Montevideo, Uruguay
2001	" <i>CriticalPath Internet Messaging Server Administration and Configuration</i> " Montevideo, Uruguay
2000	" <i>Cisco LAN Switching</i> " Cisco Systems certified course Buenos Aires, Argentina
2000	" <i>Managing Cisco Internetwork Security</i> " (MCSN) Cisco Systems certified course Buenos Aires, Argentina
1999	" <i>Cisco Internetworking Design</i> " (CID) Cisco Systems certified course Montevideo, Uruguay
1999	" <i>Cisco AS5200 Installation and Configuration</i> " (AS5200) Cisco Systems certified course Montevideo, Uruguay
1999	" <i>Cisco Internetwork Troubleshooting</i> " (CIT) Cisco Systems certified course Montevideo, Uruguay
1999	" <i>Cisco Dial Up Solutions</i> " Cisco Systems certified course Montevideo, Uruguay
1999	" <i>Cisco Campus ATM Solutions</i> " (CATM) Cisco Systems certified course Buenos Aires, Argentina
1999	" <i>Cisco Voice Over IP Solutions</i> " Cisco Systems certified course Buenos Aires, Argentina
1998	" <i>Introduction to CiscoWorks Configuration</i> " (ICWC) Cisco Systems certified course Buenos Aires, Argentina
1998	" <i>Advanced Cisco Router Configuration</i> " (ACRC) Cisco Systems certified course Buenos Aires, Argentina

