

Antonio Rodríguez Moral

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Summary

Seasoned executive with a strong track record at the intersection of business management, strategy, and technology, developed through an extensive international career spanning management consulting, high-tech and telecommunications sectors, working for and with start-ups, large multinational companies and Fortune 500 corporations. Proven ability of combining strategic vision with hands-on execution capabilities, having led cross-functional teams across multiple geographies and cultures to deliver transformative business outcomes, in projects that required to bridge business and technical teams with C-suite leadership, chart and navigate uncertainty and ambiguity in rapidly evolving markets, translate complex technological innovations into actionable business strategies and new products and services, and drive organizational change in diverse corporate environments.

- Founded and directed, over 8 years, a boutique consulting firm (MachiMind LLC) specialized in AI transformation, providing advisory services across AI strategy, AI automation, AI solution design and AI product management. Successfully advised diverse clients -SMBs, high-growth start-ups and executives in large corporations- through end-to-end AI adoption, from initial feasibility assessments and ROI modeling to pilot design: identified high-impact AI opportunities, designed AI transformation roadmaps and AI solutions that drove measurable business outcomes. Led 15+ projects for AI-enabled optimization of operational costs, and for revenue growth through new AI-enabled products/services, customer experiences enhanced by AI, and data-driven decision-making capabilities.
- 10 years of experience as director in global consulting firms (Altran, Atos, Arthur D. Little). Successfully built and scaled up, in three occasions, a profitable consulting business, effectively competing against Big Four firms: P&L ownership; go-to-market strategy; service portfolio; brand management; sales management; key client relationships (C-suite) and partnerships. Recruited and coached high-performance teams. Led 50+ high-impact consulting projects on strategy, operations & innovation that helped clients in several industries (automotive, energy, financial services, manufacturing, telco, media, public sector, software services) in Spain and other countries achieve ambitious growth and transformation goals.
- 12 years of international R&D and Product Management experience in high-tech and telecommunications, in both global corporations (AT&T, Lucent Technologies) and fast-paced start-ups (Photuris, Corvis), in the US and Europe. Spent 8 years in the R&D staff at Bell Labs, one of the world's premier innovation centers, working at the cutting edge of technological advancement and contributing to breakthrough research that shaped industry standards. Successfully led end-to-end product management for next-generation Internet software platforms and advanced optical networks, from early-stage concept development and technical feasibility through market positioning and commercialization. Demonstrated expertise in translating complex technical architectures into compelling product roadmaps, collaborating with engineering teams to balance innovation with time-to-market pressures, and working closely with sales and business development teams to secure major customer contracts and deployments.

Professional Experience

MachiMind LLC

2016-2024

Founder and Managing Director

San Francisco Bay Area, CA, USA

- Served 15+ clients across the San Francisco Bay Area -SMBs, venture-backed start-ups, and top-level executives at Fortune 500 corporations-, acting as business and technical expert on AI strategy and transformation, AI automation, AI solutions and AI product management.
- Led projects on diverse sectors including fintech, education, retail, manufacturing, and enterprise SaaS, with scopes ranging from \$25K assessments to multi-million dollar transformation programs.
- Gained direct exposure to bleeding-edge AI technology developments while working alongside innovation teams at leading technology companies and high-growth start-ups.
- Developed fine-tuned key insights about what works for AI to enable incremental transformation and business model innovation, how industry leaders are reshaping their business models for the AI age, and how emerging disruptors are capturing market share in traditionally stable sectors.

Altran Consulting

2011-2014

Managing Director, Business Consulting

Madrid, Spain

(Global tech & consulting firm with EUR 3 billion annual revenue, and presence in 30 countries)

- Head of the Business Consulting Business Unit (BU) and member of the Telco, Media & Tech Division executive team, chartered with making key strategic business decisions.
- Scaled the BU from zero to a 25-people team with industry-top revenue and profit KPIs in 3 years.
- Acted as Corporate Strategy Team for the CEO and several Division Executive teams, developing 10+ internal projects on corporate & business strategy, competitive positioning, product portfolio strategy, operational transformation and internationalization strategies.
- Successfully expanded the BU into the United Arab Emirates (UAE) market.
- Key clients: Telefonica, Vodafone, Nokia, Gas Natural, STC Group (Saudi Telecom in Dubai).

Atos Consulting

2007-2010

Senior Director, Business Consulting

Madrid, Spain

(Global firm with EUR 13 billion annual revenue, and presence in 73 countries)

- Head of the Strategy & Innovation global practice, with 120+ consultants worldwide.
- Scaled up revenue to 7-digits and profitability by 3x, effectively competing against Big Four firms.
- Identified key focus areas for business growth, evaluating industry trends, evolving client needs and requirements for brand differentiation; crafted competitive analysis & go-to-market strategy.
- Developed the service portfolio from scratch to a comprehensive offering that spanned six functional practices (from Strategy & Innovation to Operations Transformation).
- Built a high-performance team in Spain, scaling up headcount from 1 to 35 people in 3 years.
- Main contributor to Telco & Media global outlook (annual industry & technology analysis).
- Key clients: Orange, Iberdrola, BBVA, Government of Spain, Government of Egypt, World Bank.

Arthur D. Little

2004-2007

Technology & Innovation Management Practice Leader

Madrid, Spain

- Built the practice in Spain from the ground up to 7-digits EUR revenue, winning 5 new key accounts.
- Designed the service portfolio and built the consulting team from scratch.
- Led several cross-functional teams for clients in key projects, across product/service development, IT & operations, marketing & sales, finance and human resources.
- Participated, as innovation management expert, in 8 projects for clients in EU countries.
- Key clients: Orange, Telefonica, VISA, Mondragon, Repsol, Endesa, Madrid City Council.

Corvis*Director Business Development - Iberia***2002-2004***Madrid, Spain (HQ in USA)*

(Start-up that developed an industry-first product for high-capacity optical networks)

- Led business development activities that resulted in a EUR 40M contract with Telefonica, establishing Corvis as Telefonica's only non-incumbent supplier in its market segment (high-capacity optical networks).
- Supported the VP of Business Development (in the US) in business development activities for service providers in Europe, winning 3 new clients (BT, France Telecom, Worldcom) for a total of EUR 90M.

Photuris*Chief Architect & Member of Founding Team***2000-2002***Piscataway, NJ & Mountain View, CA, USA*

(Start-up that developed an innovative, industry-first product for optical networks)

- Member of the Core Founding team of this start-up that developed the first Reconfigurable Optical Add/Drop Multiplexer (ROADM) with Wavelength Selective Switching (WSS) technology -based on an innovative, proprietary, MEMS (Micro-Electro-Mechanical Systems) switch- in the industry.
- Supported founders, VP of Sales and VP of Business Development, in engagements with key potential customers and partners, and contributed to successfully raising \$75M from Tier-1 Silicon Valley venture capital firms, including Greylock Partners.
- Led the Product Architecture team, chartered with formulating and managing the product strategy, product portfolio and product roadmap.
- Developed, together with R&D staff and system engineers, several key components of the ROADM solution: dynamic optical channel routing, setup & restoration algorithms, optical network signalling protocols, IP over DWDM framing protocols.
- Supported the R&D, Engineering and Sales teams, from initial proof of concept to network deployment with two major U.S. service providers (Verizon, AT&T).

Bell Labs (AT&T, Lucent Technologies)*Senior Member of Technical Staff (R&D)***1992-2000***Spain; UK; The Netherlands & Holmdel, NJ, USA*

- Led a 20-people team chartered with product portfolio roadmap, competitive analysis, and strategic technology assessment for Lucent next-generation AON (all-optical networks) and IP optical networking products.
- Served as delegate to international standardization bodies on Internet infrastructure (IETF) and optical networks (ITU-T).
- Technical Staff Member in the pioneering MONET (Multiwavelength Optical NETWORKS) project (sponsored by the Defense Advanced Research Projects Agency (DARPA) of the U.S. Department of Defense), and Internet2 project (for 210 educational institutions, 70 corporations and 45 non-profit and government agencies in the U.S. research and education community): prototyping and concept testing of next-generation Internet and optical network technologies -components, subsystems, systems, network architectures- for reliable, high-capacity, high performance and cost effective national optical networks based on Dense Wave Division Multiplexing (DWDM) technology.
- Supported sales teams for key customers worldwide (e.g. AT&T, Worldcom, Verizon, Telefonica, Vodafone, Orange, BT, NTT, China Telecom), which resulted in several multi-million contracts.
- Contributed to the definition of AT&T's next-gen global network architecture.
- Led the Systems Engineering Team -across 6 countries in Europe and the U.S.- in the development of innovative Fiber To The Home (FTTH) networks, which resulted in the first ever large-scale deployment of FTTH in Europe (1 million households in Germany) with Passive Optical Networks (PON) technology.

Education

1. University Degrees

1. **PhD in Economics**, *UNED*, Spain, 2024. Summa cum Laude ("*Sobresaliente Cum Laude*"). Nominated for Extraordinary Doctorate Award ("*Premio Extraordinario de Doctorado*").
2. **B.S. in Economics**, *UNED*, Spain, 2014. Class Rank: 2 of 117. Graduation Project: Honors Qualification ("*Matricula de Honor*").
3. **M.S. in Information & Knowledge Society** (Interdisciplinary Program), *Universitat Oberta de Catalunya (UOC)*. Spain, 2007.
4. **B.S. & M.S. in Electrical & Computer Engineering** ("Ingeniero de Telecomunicacion"), *Universidad Politecnica de Madrid (UPM)*. Spain, 1992. Graduation Project: Honors Qualification ("*Matricula de Honor*").

2. Executive Education

1. **Certified Sales Professional**. *Miller Heiman Group* (now *Korn Ferry*). Milton Keynes. UK, 2013. Courses:
 - a. Strategic Selling
 - b. Conceptual Selling
 - c. Large Account Management Process
 - d. Executive Impact
2. **High Impact Leadership Program**. *Columbia Business School*. NY, US, 2009.
3. **Digital Business Models**. *IE Business School*. Madrid, Spain, 2008.
4. **Executive Negotiation**. *IE Business School*. Madrid, Spain, 2007.
5. **Post-graduate program in Business Management**. *Columbia Business School*. NY, US, 2000. Courses:
 - a. Project management
 - b. Strategies for competing in global markets
 - c. Business case development
 - d. Digital marketing
 - e. New product development

3. Online Courses & Certificates

AI, LLMs, Machine Learning

1. **AI for Business Specialization** (4 courses). *University of Pennsylvania (Wharton School)*, PA, US. Courses:
 - a. AI Fundamentals for Non-Data Scientists
 - b. AI Applications in Marketing and Finance
 - c. AI Applications in People Management
 - d. AI Strategy and Governance
2. **AI Product Management Specialization** (3 courses). *Duke University*, NC, US. Courses:
 - a. Machine Learning Foundations for Product Managers
 - b. Managing Machine Learning Projects
 - c. Human Factors in AI

3. **Large Language Models Operations (LLMOps) Specialization** (6 courses). *Duke University, NC, US.*
Courses:
 - a. Introduction to Generative AI
 - b. Operationalizing LLMs on Azure
 - c. Advanced Data Engineering
 - d. GenAI and LLMs on AWS
 - e. Databricks to Local LLMs
 - f. Open Source LLMOps Solutions
4. **Machine Learning Specialization** (4 courses). *University of Washington, WA, US.* Courses:
 - a. Machine Learning Foundations: A Case Study Approach
 - b. Machine Learning: Regression
 - c. Machine Learning: Classification
 - d. Machine Learning: Clustering & Retrieval
5. **Deep Learning Specialization** (5 courses). *DeepLearning.ai & Stanford University, CA, US.* Courses:
 - a. Neural Networks and Deep Learning
 - b. Convolutional Neural Networks
 - c. Sequence Models
 - d. Structuring Machine Learning Projects
 - e. Improving Deep Neural Networks
6. **Introduction to AI.** *Stanford University, CA, US.*

Other Topics (selection)

1. **Game Theory.** *Stanford University, CA, US.*
2. **Game Theory II: Advanced Applications.** *Stanford University, CA, US.*
3. **Organizational Analysis.** *Stanford University, CA, US.*
4. **Developing Innovative Ideas for New Companies.** *University of Maryland, MD, US.*
5. **Model Thinking.** *University of Michigan, MI, US.*
6. **Social and Economic Networks: Models and Analysis.** *Stanford University, CA, US.*
7. **Networks, Crowds and Markets.** *Cornell University, NY, US.*
8. **Understanding Media by Understanding Google.** *Northwestern University, IL, US.*
9. **Computational Neuroscience.** *University of Washington, WA, US.*

Expertise & Key Skills

Business expertise

1. AI strategy; AI product management; AI transformation; AI automation; Agentic AI; Digital transformation
2. Business model analysis; Business model innovation; Business & corporate strategy; Product management; Innovation management; Market & competitive analysis
3. Business development; Growth hacking; C-suite relationship building; Strategic selling; High-performance team building & mentoring

Technology expertise

1. Predictive & Generative AI, AI agents; Large Language Models (LLMs); Machine Learning; Advanced analytics
2. Cloud services & platforms
3. Telco, mobile and Internet software, services & networks

Industry expertise

1. Telco, media & technology (TMT)
2. Cloud services (SaaS, PaaS)
3. Enterprise Software

International experience

Global mindset. Worked for clients and in projects across 23 countries in 5 continents: Spain, Belgium, Finland, France, Germany, Italy, Ireland, The Netherlands, Portugal, Sweden, Switzerland, UK; Canada, USA; Argentina, Brazil; Egypt (3 years), UAE/Dubai (2 years), Qatar; China, Japan, Singapore, Taiwan, Vietnam (2 years). Lived in Spain, USA (15 years), UK (1 year), and The Netherlands (1 year).

Patents & Publications

- Granted 6 patents on telecommunications by the US Patent Office.
- Co-authored a book on Global Information Networks.
- Authored 10 papers on Telecommunications research and 3 papers on Economics research, published in leading peer-reviewed journals, and over 25 articles and invited talks in top Telecommunications industry conferences.
- Contributed to global Internet and telecommunications standards as delegate (5 years) to ITU-T and IETF.

Patents

1. "Method and apparatus for providing multiple optical channel protection switching mechanisms in optical rings." R. Iyer, M. Sampangi, A. Rodriguez-Moral, P. Bonenfant, X. Mang, L. Zhang. US Patent # US-7715713-B1. May 2010.
2. "Method and apparatus for processing protection switching mechanism in optical channel shared protection rings." R. Iyer, M. Sampangi, A. Rodriguez-Moral, P. Bonenfant, X. Mang, L. Zhang. US Patent # US-7596313-B1. September 2009. (Continuation US-7277631-B1).
3. "Method and apparatus for processing protection switching mechanism in optical channel shared protection rings." R. Iyer, M. Sampangi, A. Rodriguez-Moral, P. Bonenfant, X. Mang, L. Zhang. US Patent # US-7277631-B1. October 2007.

4. "Optical automatic protection switching mechanism for optical channel shared protection rings." R. Iyer, M. Sampangi, A. Rodriguez-Moral, P. Bonenfant, X. Mang, L. Zhang. US Patent # US-7269346-B1. September 2007.
5. "Dual-homing select architecture." S. Baroni, B. T. Doshi, P. Harshavardhana, M.A. Qureshi, A. Rodriguez-Moral, D. Sugerman. US Patent # US-6662308-B1. December 2003.
6. "Method and apparatus for adaptive routing in packet networks." A. Rodriguez-Moral. US Patent # US-6260072-B1. July 2001.

Publications

Books - Telecommunications

1. "Achieving Global Information Networking." E. L. Varma, A. Rodriguez-Moral, G. W. Newsome, D. K. Doherty, T. Stephant, C. Pageot-Millet, J.M. Cornily. Artech House, September 1999.

Journal Papers and Book Chapters (Peer-Reviewed) - Economics Research

1. "Cognitive reflection in experimental anchored guessing games." C. Ballester, A. Rodriguez-Moral, M. Vorsatz. *Games and Economic Behavior*, Vol. 148, p. 179-195. November 2024.
2. "Simplified mental representations as a cause of overprecision." R. Lopez-Perez, A. Rodriguez-Moral, M. Vorsatz. *Journal of Behavioral and Experimental Economics*, Vol. 92, 101681. June 2021.
3. "An Overview of the Measurement of Segregation: Classical Approaches and Social Network Analysis." A. Rodriguez-Moral, M. Vorsatz. In "Complex Networks and Dynamics. Lecture Notes in Economics and Mathematical Systems", p. 93-119. Springer. September 2016.

Journal Papers (Peer-reviewed) - Telecommunications Research

1. "Generic Framing Procedure (GFP): the catalyst for efficient data over transport." P. Bonenfant, A. Rodriguez-Moral. *IEEE Communications Magazine*, Vol. 40, No. 5, May 2002.
2. "Regional optical transport networks." P. Bonenfant, A. Rodriguez-Moral. *IEEE Journal of Optical Networking*, Vol. 1, No. 1, January 2002.
3. "Framing techniques for IP over fiber." P. Bonenfant, A. Rodriguez-Moral. *IEEE Network Magazine*, Vol. 15, No. 4, July/August 2001.
4. "The optical Internet: architectures and protocols for the global infrastructure of tomorrow." A. Rodriguez-Moral, P. Bonenfant, and M. Krishnaswamy, *IEEE Communications Magazine*, Vol. 39, No. 7, July 2001.
5. "Optical data networking: protocols, technologies, and architectures for next generation optical transport networks and optical internetworks." A. Rodriguez-Moral, P. Bonenfant, S. Baroni, R. Wu. *IEEE/OSA Journal of Lightwave Technology*, special issue on "Optical networks", Vol. 18, No. 12, December 2000.
6. "Analysis and design of backbone architecture alternatives for IP optical networking." S. Baroni, J. O. Eaves, M. Kumar, M. A. Qureshi, A. Rodriguez-Moral, D. Sugerman. *IEEE Journal of Selected Areas in Communications*, special issue on "Protocols and architectures for next-generation optical WDM networks", Vol. 18, No. 10, October 2000.
7. "Optical data networking." P. Bonenfant, A. Rodriguez-Moral. *IEEE Communications Magazine*, Vol. 38, No. 3, March 2000, special issue on "WDM optical networks: a reality check."

8. "Protocols and architectures for IP optical networking." J. Anderson, J. S. Manchester, A. Rodriguez-Moral, M. Veeraraghavan. Bell Labs Technical Journal, Vol. 4, No. 1, March 1999, special issue on "Optical networking."
9. "The MONET New Jersey network demonstration." L.D. Garret et al. (incl. A. Rodriguez-Moral). IEEE Journal on Selected Areas in Communications, Vol. 16, No. 7, September 1998, special issue on "High capacity optical transport networks."
10. "LIBRA: An Integrated framework for type of service-based adaptive routing in the Internet and intranets. A. Rodriguez-Moral, Bell Labs Technical Journal, Vol. 2, No. 2, June 1997, special issue on "Packet networking."

Journal Papers - Innovation

1. "Open innovation: new rules, new challenges." A. Rodriguez-Moral. Atos Consulting VIEW Magazine. June 2008.
2. "Open innovation between business and government: clever practices." M. Wagemans, A. Rodriguez-Moral, K. Stewart. Arthur D. Little PRISM Magazine. Issue 1, 2007.

Conference Papers - Telecommunications Research

1. "Purpose-built solutions for regional optical transport networks." P. Bonenfant, A. Rodriguez-Moral. Proceedings of NFOEC -2002 (National Fiber Optic Engineering Conference), September 15-19, 2002, Dallas, TX, U.S.
2. "Economic advantages of converged DWDM/TDM platforms with mixed optical/TDM protection." A. Rodriguez-Moral, M. Deng, X. Mang, P. Bonenfant; Proceedings of NFOEC-2002. September 19, 2002. Session on "DWDM Economics".
3. "Network architecture implications of optical internetworking, the optical Internet and gigabit optical Ethernet." P. Bonenfant, A. Rodriguez-Moral. Proceedings of NFOEC-2001, July 8-12, 2001, Denver, CO, U.S.
4. "Digital Wrappers for IP over WDM systems." A. Rodriguez-Moral, P. Bonenfant. IEEE/LEOS 2000 Summer Topical Meeting on "Broadband optical networks", July 26-28, 2000, Aventura, FL, US. [Invited contribution]
5. "Backbone network architectures for IP optical networking." S. Baroni, J. O. Eaves, M. A. Qureshi, A. Rodriguez-Moral, D. Sugerman. Proceedings of OFC-2000, March 10, 2000, Baltimore, MD, U.S.
6. "Next Generation Optical Transport Networks and Optical Internetworks". 4th Working Conference on Optical Network Design and Modelling (ONDM'2000), February 7-8, 2000, Athens, Greece. [Invited contribution]
7. "Optical data networking – IP over X." A. Rodriguez-Moral, P. Bonenfant. IEEE Globecom'99, Workshop on high-speed networks, December 5-9, 1999, Rio de Janeiro, Brazil.
8. "IP over WDM: The missing link." P. Bonenfant, A. Rodriguez-Moral, J. Manchester, A. McGuire; Proceedings of NFOEC'99, September 26-30, 1999, Chicago, IL, U.S.
9. "Integrated routing strategies in IP/DWDM networking." M. Veeraghavan, A. Rodriguez-Moral, J. Anderson. ICC'98. Workshop on management of multiwavelength optical networks, June 7, 1998, Atlanta, GA, U.S.
10. "National-Scale WDM Networking Demonstration by the MONET Consortium." R. S. Vodhanel et al. (incl. A. Rodriguez-Moral). Proceedings of OFC-1997, February 22, 1997, Dallas, TX, U.S.

Conference Invited Talks

1. "MNO strategies for the MVNO challenge – A perspective on the emerging Middle East MVNO market." 19th Annual Middle East Telco Summit (MECOM 2013). September 23, 2013. Dubai. UAE.
2. "Socio-economic impact of FTTH networks." World Telecommunication and Information Society Day. May 17, 2013. Madrid. Spain
3. "La Economía digital en 2020. Oportunidades y amenazas para el sector de las telecomunicaciones." IV Summer University Programs UPM-AMETIC. July 9, 2012. La Granja de San Ildefonso. Spain.
4. "Open innovation begins with corporate strategy." 2009 IAVANTE International Symposium on User-Driven Open Innovation. October 8, 2009. Granada, Spain.
5. "Open innovation: new rules, new challenges." Keynote speaker at the Roundtable on Open Innovation. Innovautas 2008. November 13, 2008. Madrid. Spain.
6. "El futuro de la TV, Media 2.0 y otras incertidumbres." VII Jornadas Profesionales Fundación AVA sobre Tendencias e Innovación de la Producción y Distribución Audiovisual. June 12, 2008. Sevilla, Spain.
7. "Web 2.0: hype or hope?" Diada de las Telecomunicaciones. September 27, 2007. Barcelona, Spain.
8. "Web 2.0: ¿new hope for digital convergence or a new tech bubble?" 9th Internet Global Congress. April 16, 2007. Barcelona, Spain.
9. "Network Architectures and Key Technologies in Next-Generation DWDM Networks and Optical Internet." Seminar organized by the Spanish Chapter of IEEE and the Optical Communications Group of Universidad Politécnica de Valencia, and ICARO (Iniciativa en Comunicaciones Avanzadas y Redes Ópticas), October 26, 2001, Valencia, Spain.
10. "Control and management of next-generation optical networks and the optical Internet." Optical Networking Forum. April 18, 2000. Rome, Italy.
11. "Optical networking architecture and evolution." IIR (Institute for International Research) International Conference on "Next Generation Networks", March 27-29, 2000, London, U.K.
12. "Digital Wrappers for terabit optical transport networks." 1st European Conference on Terabit Networking, February 21-23, 2000, Paris, France.
13. "Optical data networking: optical internetworking demystified." The Optical Internet Summit 2000, January 18-19, 2000, Dallas, TX, U.S.
14. "Optical data networking." IIR (Institute for International Research) International Conference on "Strategies for migrating towards IP over WDM", September 27-29, 1999, London, U.K.
15. "Optical transport network architecture: vision and evolution." ICM Conference on Optical Internetworking. June 15-17, 1999. Washington, D.C., U.S.

IETF Standards

1. "Architectural Framework for Automatic Protection Provisioning in Dynamic Optical Rings." N. Ghani, J. Fu, D. Guo, X. Liu, Z. Zhang, P. Bonenfant, L. Zhang, A. Rodriguez-Moral, M. Krishnaswamy, D. Papadimitriou, S. Dharanikota, R. Jain; IETF Internet Draft, March 2001.
2. "Lightpath Route Extensions to RSVP-TE for optical channel connection setup." M. Krishnaswamy, L. Zhang, A. Rodriguez-Moral; IETF Internet Draft, February 2001.
3. "MPLS Control Plane for Switched Optical Networks." M. Krishnaswamy, G. Newsome, J. Gajewski, A. Rodriguez-Moral, S. Shew, M. Mayer, IETF Internet Draft, February 2000.