DOWNLOAD PDF STANDARDS POLICY FOR INFORMATION INFRASTRUCTURE

Chapter 1 : Standards Policy for Information Infrastructure : Janet Abbate :

Although there are many competing visions of information infrastructure, there is universal agreement that standards will play a critical role. The history of OSI, the Internet, and industry consortia shows that standards development has become a rich, multifaceted process, critically linked to market strategy and major issues of public policy.

Show Context Citation Context In consolidation, the final stage of the LTS model,scompetition among technological systems and standards is resolved in one of two ways. Abstact--This paper focuses on the processes producing the standards which make up the technical back-bone of an information infrastructure. These standards are neither ready-made nor neutral. We explore how this takes place, identifying by whom, where and how inscriptions are made. Our principal aim is to uncover the socio-technical complexity of establishing an information infrastructure, a complexity which so far has been severely underestimated by those involved. By studying the process of aligning and linking one inscription to other inscriptions, we also hope to learn more about the strength of inscriptions, that is, the degree to which an inscription actually succeeds in enforcing a desired behaviour. The empirical basis of our analysis is a case-study of standardization processes of health information Show Context Citation Context An information infrastructure has to scale, hence change, as it expands. This creates a dilemma. The expansion fuels new patterns of use which require changes while, on the other hand, the diffusion of and investments in the information infrastructure has a strong, conservative influence the i The expansion fuels new patterns of use which require changes while, on the other hand, the diffusion of and investments in the information infrastructure has a strong, conservative influence the intertia of the installed base. The changes required to implement the scaling have to be small-step. These transitions are highly involved socio-technical negotiations. This paper is based on a case study of the efforts to change the internet protocol IP in Internet to facilitate further growth. The revision of IP is the most serious challenge to the continued scaling of the Internet during its near 30 years of existence. Introduction Infrastructure technology lasts for many years and A considerable body of literature has demonstratedâ€" empirically as well as analyticallyâ€"that information systems need to be situated to the local context of use. Yet for infrastructural information systems that span numerous contexts spread out globally, this is literally prohibitive. For these systems to work, it is necessary to strike a balance between sensitiveness to local contexts and a need to standardize across contexts. Empirically, we draw from an ongoing case study. We elaborate design implications and concepts relevant to developing information infrastructures that also apply to the context of developing countries.

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Chapter 2 : Information Technology Infrastructure Library (ITIL) Guide

Standards policy for information infrastructure Standards policy for information infrastructure Hert, Carol A. disparities between the status of men and women in the library field increased at that time.

At the core of the Service Lifecycle is Service Strategy. Service Strategy provides guidance on how to view service management not only as an organizational capability but as a strategic asset. Guidance is provided on the principles underpinning the practice of service management which are useful for developing service management policies, guidelines and processes across the ITIL Service Lifecycle. Topics covered in Service Strategy include the development of service markets, characteristics of internal and external provider types, service assets, the service portfolio and implementation of strategy through the Service Lifecycle. Organizations already practicing ITIL use Service Strategy to guide a strategic review of their ITIL-based service management capabilities and to improve the alignment between those capabilities and their business strategies. This ITIL volume encourages readers to stop and think about why something is to be done before thinking of how. Service Design For services to provide true value to the business, they must be designed with the business objectives in mind. Service Design is the stage in the lifecycle that turns Service Strategy into the blueprint for delivering the business objectives. Service Design provides guidance for the design and development of services and service management practices. It covers design principles and methods for converting strategic objectives into portfolios of services and service assets. The scope of Service Design is not limited to new services. It includes the changes and improvements necessary to increase or maintain value to customers over the lifecycle of services, the continuity of services, achievement of service levels, and conformance to standards and regulations. It guides organizations on how to develop design capabilities for service management. Service Transition Service Transition provides guidance for the development and improvement of capabilities for transitioning new and changed services into live service operation. This publication provides guidance on how the requirements of Service Strategy encoded in Service Design are effectively realized in Service Operation while controlling the risks of failure and disruption. The publication combines practices in Change, Configuration, Asset, Release and Deployment, Programme and Risk Management and places them in the practical context of service management. It provides guidance on managing the complexity related to changes to services and service management processes; preventing undesired consequences while allowing for innovation. Guidance is provided on transferring the control of services between customers and service providers. Service Transition introduces the Service Knowledge Management System, which builds upon the current data and information within Configuration, Capacity, Known Error, Definitive Media and Assets systems and broadens the use of service information into knowledge capability for decision and management of services. Service Operation Service Operation embodies practices in the management of the day-to-day operation of services. It includes guidance on achieving effectiveness and efficiency in the delivery and support of services to ensure value for the customer and the service provider. Strategic objectives are ultimately realized through Service Operation, therefore making it a critical capability. Guidance is provided on how to maintain stability in service operations, allowing for changes in design, scale, scope and service levels. Organizations are provided with detailed process guidelines, methods and tools for use in two major control perspectives: Managers and practitioners are provided with knowledge allowing them to make better decisions in areas such as managing the availability of services, controlling demand, optimizing capacity utilization, scheduling of operations and fixing problems. Guidance is provided on supporting operations through new models and architectures such as shared services, web services and mobile commerce. This book discusses some of the newer industry practices to manage virtual and service-oriented architectures. Continual Service Improvement Continual Service Improvement provides instrumental guidance in creating and maintaining value for customers through better design, transition and operation of services. It combines principles, practices and methods from quality

management ,change management and capability improvement. Organizations learn to realize incremental and large-scale improvements in service quality, operational efficiency and business continuity. Guidance is provided for linking improvement efforts and outcomes with service strategy, design and transition. Summary ITIL implementation is not a quick fix, nor is it easy. It takes a lot of thought, commitment and hard work to successfully change the way an IT organization does business. There will be things that you do today that you will not do afterwards and vice-versa. Most people will continue to do what they do today, but they will become more productive as a result of using more efficient, repeatable processes. Remember that ITIL is a framework, so it is designed for creativity to be built around the base set of best practices. One need not employ them all, just those that make sense and fit into the way the organization wants to do business in the future. Some processes may be abandoned when post-implementation reviews show limited value, and others may be implemented as gaps are uncovered and solutions found. Implementing ITIL will improve service delivery by improving and building business partnerships as a result of changing to an enterprise business focus. Processes and procedures will be streamlined to ensure consistent, efficient services are delivered to the customer. IT will use cost-effective, easy-to-use tools to automate processes, directing staff energies to focus on problem areas and performance improvement opportunities. Meaningful and measurable metrics will reveal IT service performance. The bottom line is that ITIL improves functions throughout the enterprise. Customers will be delighted with the improved quality of IT services through execution of consistent, repeatable processes. IT staff will welcome the improved organizational efficiency through use of ITIL processes and well-defined and roles and responsibilities. Finance will value the lower unit costs achieved by leveraging efficiencies to improve productivity of IT staff and infrastructure resources. And management will appreciate finally having meaningful and measurable metrics that gauge IT service performance in business terms.

Chapter 3 : Standards Policy for Information Infrastructure | Brian Kahin - calendrierdelascience.com

Standards Policy for Information Infrastructure edited by Brian Kahin and Janet Abbate A Publication of the Harvard Information Infrastructure Project.

Preprinted forms Human resource assets It is important to have a complete inventory of the information assets supporting the business processes. The best way to create this list is to perform a risk assessment inventory. However, other methods, such as using purchase information, are available Regardless of the methods used, you should ensure that everything is documented. Inventories, like policies, must go beyond the hardware and software. There should be a list of documentation on programs, hardware, systems, local administrative processes, and other documentation that describes any aspect of the technical business process. These documents can contain information regarding how the business works and can show areas that can be attacked. Remember, the business processes can be affected by industrial espionage as well as hackers and disgruntled employees. Using blank invoices and letterhead paper allows someone to impersonate a company official and use the information to steal money or even discredit the organization. So, include those supplies in the inventory so policies can be written to protect them as assets. The most important and expensive of all resources are the human resources who operate and maintain the items inventoried. Performing an inventory of the people involved with the operations and use of the systems, data, and noncomputer resources provides insight into which policies are necessary. Creating an inventory of people can be as simple as creating a typical organizational chart of the company. This can be cumbersome, however, if you are including a thousand, or even a few hundred, people in one document. Moreover, organizational charts are notoriously rigid and do not assume change or growth. Identify from Whom It Is Being Protected Defining access is an exercise in understanding how each system and network component is accessed. Your network might have a system to support network-based authentication and another supporting intranet-like services, but are all the systems accessed like this? How is data accessed amongst systems? By understanding how information resources are accessed, you should be able to identify on whom your policies should concentrate. Some considerations for data access are Authorized and unauthorized access to resources and information Unintended or unauthorized disclosure of information Enforcement procedures Bugs and user errors Primarily, the focus should be on who can access resources and under what conditions. This is the type of information that can be provided during a risk analysis of the assets. The risk analysis then determines which considerations are possible for each asset. From that list, policies can then be written to justify their use. Setting Standards When creating policies for an established organization, there is an existing process for maintaining the security of the assets. These policies are used as drivers for the policies. Regardless of how the standards are established, by setting standards, policies that are difficult to implement or that affect the entire organization are guaranteed to work in your environment. Even for small organizations, if the access policies require one-time-use passwords, the standard for using a particular token device can make interoperability a relative certainty. Creating Baselines Baselines are used to create a minimum level of security necessary to meet policy requirements. Baselines can be configurations, architectures, or procedures that might or might not reflect the business process but that can be adapted to meet those requirements. You can use these baselines as an abstraction to develop standards. Most baselines are specific to the system or configuration they represent, such as a configuration that allows only Web services through a firewall. However, like most baselines, this represents a minimum standard that can be changed if the business process requires it. One example is to change the configuration to allow a VPN client to access network resources. Guidelines Standards and baselines describe specific products, configurations, or other mechanisms to secure the systems. Sometimes security cannot be described as a standard or set as a baseline, but some guidance is necessary. These are areas where recommendations are created as guidelines to the user community as a reference to proper security. For example, your policy might require a risk analysis every year. Rather than require specific

procedures to perform this audit, a guideline can specify the methodology that is to be used, leaving the audit team to work with management to fill in the details. Setting and Implementing Procedures The last step before implementation is creating the procedures. Procedures describe exactly how to use the standards and guidelines to implement the countermeasures that support the policy. These procedures can be used to describe everything from the configuration of operating systems, databases, and network hardware to how to add new users, systems, and software. As was illustrated in Figure 3. Procedures are written to support the implementation of the policies. Because policies change between organizations, defining which procedures must be written is impossible. For example, if your organization does not perform software development, procedures for testing and quality assurance are unnecessary. These procedures are where you can show that database administrators should not be watching the firewall logs. These procedures should discuss how to involve management in the response as well as when to involve law enforcement. Implementation of these procedures is the process of showing due diligence in maintaining the principles of the policy. Showing due diligence is important to demonstrate commitment to the policies, especially when enforcement can lead to legal proceedings. Demonstrating commitment also shows management support for the policies. When management does not show this type of commitment, the users tend to look upon the policies as unimportant. When this happens, a disaster will eventually follow. When enforcing the policies can lead to legal proceedings, an air of noncompliance with the policies can be used against your organization as a pattern showing selective enforcement and can question accountability. Showing due diligence can have a pervasive effect. Management supporting the administrators showing the commitment to the policies leads to the users taking information security seriously. When everyone is involved, the security posture of your organization is more secure. This does require the users to be trained in the policies and procedures, however. Therefore, training is part of the overall due diligence of maintaining the policies and should never be overlooked. To be successful, resources must be assigned to maintain a regular training program.

Chapter 4 : Infrastructure Cabling and Wiring Standards - Information Technology Services

Standards Policy for Information Infrastructure by Janet Abbate, , available at Book Depository with free delivery worldwide.

Rooms with more than square feet should have two duplex communication outlets. Faculty or staff offices Two duplex data communications outlets jacks for offices with fixed walls of square feet or more are required. One additional duplex data outlet for each additional square feet of office space or each additional occupant is required. For offices designed with modular furniture, each cubicle or workstation will be provided with one duplex communication outlet per designated occupant. Additionally, a set of station wires one voice and one data will be installed as a spare to each cluster of six 6 office cubicles. Graduate student offices One duplex communication outlet for every 75 square feet of space. Laboratories As a minimum, install one single wall phone outlet and one duplex data communication outlet. Since laboratories requirements are diverse, coordinate with the end user and Information Technology Services at the onset of design for renovation and new construction projects, and prior to the initiation of work orders, contracts, or other installation action for other types of projects. Libraries Libraries will be wired in accordance with the size of the room and need for communication. Residence halls Install one voice jack per room, one data jack per student, and one cable TV outlet in each room. Storage areas One wall-phone communication outlet for each room over square feet and one additional phone outlet for each additional square feet are required. Access to cross-connects Access to the cross-connect is acceptable by either extending the cable tray or providing conduit. Backbone cabling requirements The main building wiring closet will have single mode fiber originating from and distributed to each of the other wiring closets on each floor in the building. Fiber cabling from the first floor main wiring closet to and between each of the building floors shall be twelve strands 12 single-mode optical fiber. Fiber optic cable shall have at least 30 feet of additional cable slack on each end upon entering the cross-connect room. Previously, main and intermediate cross-connects were called main distribution frames MDF and intermediate distribution frames IDF , respectively. This document will use the term cross-connect to represent either the main or intermediate cross-connect. Conduit maximum lengths without pull boxes No conduit run, without a pull box, is to be longer than feet and have no more than two degree bends. Conduit specifications Conduits to communication outlets are to be a minimum of one inch. A dedicated conduit will serve each outlet box. Pull boxes, if needed, must be accessible. Do not place pull boxes above fixed ceilings, HVAC ducts or piping. Drop ceilings A cable wire tray may be placed above drop ceilings with the 1-inch communication outlet conduits stubbed to the cable tray from individual room outlets. This tray will provide a path back to the cross-connect. The tray will have a maximum of 8-inch spacing between cable supports and 4-inch sides. Width of the tray will be determined by the quantity of cables in the tray, and projected growth. Cable trays and conduits must be properly grounded. All NEC codes for grounding of cable trays will be adhered to. Basket tray is now acceptable, as long as, it has 4 inch sides. Electrical requirements Although the electrical load is minimal most devices draw less than 1 amp , every component requires electrical service: Each communication outlet should be located in proximity to a duplex electric outlet to accommodate the need to plug in the electronic equipment using the communication outlet. Equipment cabinet requirements Enclosed cabinets shall have a rack mount width of 19 inches, with a height dependent on space and mounting constraints. Enclosed cabinets shall have a roof mounted cable fan and cable entry. Enclosed cabinets must be at least 32 inches deep to accommodate a rack mounted uninterruptible power supply UPS. Information Technology Services shall work with end users and planners to identify equipment cabinet requirements. Existing intra-building wiring There are currently five different types of legacy network infrastructure cabling that exists within campus buildings. Fire stops Approved UL fire stops must be used when penetrating fire rated walls or floors. Horizontal cabling This is also called station or premise wiring. Horizontal cabling support to UALR spaces For new construction, each room shall have horizontal cabling to support a minimum

of two 2 data ports and one 1 telephone port using Category 6a wiring. Outlet cable path requirement All communication outlets will have conduit, wire mold, or other suitable path provided to the nearest cross-connect or to a cable tray that provides a path back to the nearest cross-connect. Cables shall be secured at every corner. If cable ties are used, they must be trimmed off cleanly at the locking hole. Cables shall be run in a uniform fashion and shall not be woven among other utilities. Each wiring run must be individually labeled. Paths for cabling between cross-connects A path between cross-connects in separate communications rooms is required. Cable tray, conduit s , or sleeved holes that provide this path are acceptable. The volume of cable and predicted expansion determines the size and quantity of the trays, conduit s , or sleeved holes that make up the path. Pull strings The electrical contractor will provide a pull string in all empty conduits. Removal of wiring Information Technology Services shall be consulted before removal of telephone wire and communications equipment, i. All wiring must be removed all the way back to the cross-connect source. Splicing and routing Splicing in station wire is not permitted. Wire must be continuous from the cross-connect to the outlet jack. Cables shall not be tie-wrapped to or routed along electrical or gas conduit. For renovation projects when it is necessary to have exposed interior wiring runs, the wire shall be enclosed using wire molding or conduit. Cable shall not be installed below ceiling in an exposed fashion, i. At the outlet end, enough additional cable slack must be left to reach the farthest corner of the wall, plus 5 feet. The wiring will be terminated with type blocks in the wiring closet. At the cross-connect end, at least 10 feet of additional cable slack must be provided past the center point of the appropriate telephone or data rack. Information Technology Services maintains this documentation. This must be submitted in writing so that accurate infrastructure records can be maintained. The A identifiers are shown in italics. Each character in the identifier represents a key piece of information. The A Standard allows administrative flexibility to accommodate variations in naming conventions format Sections A2 and A5 , such as alpha designations for floors. Each jack position on every wall plate is sequentially lettered A, B, , left to right, then top to bottom. Room identifiers frrr can be 3 or 4- character unique alphanumeric designators i. This consists of the originating telecommunications space TS , designated by fs and patch panel port an where the link originates. UALR also requires the work area identifier, wall plate, and jack identifier be labeled where the horizontal link is terminated. These are mandatory data elements to be included in cable records systems. Note that room identifiers typically use the first character s position to specify floor s. The size of the cable path will be based on the requirements of the facility. Paper and electronic copies of all testing documentation is to be provided to Information Technology Services at the conclusion of testing. The tabulated values are intended for reference only. All UTP cable and patch cordage shall be swept-tested through a prescribed frequency range. By convention, all values of electrical characteristics, while predominantly negative numbers representing losses , are expressed as absolute values positive numbers. During its requirements review, Information Technology Services will base its specific recommendations and approval of proposed projects on compatibility with the existing and planned infrastructure, legal requirements, mandatory use of state contracts, warranty and certification requirements, maintenance and overhead costs and other factors affecting the total cost of ownership.

Chapter 5 : CiteSeerX â€" Citation Query Standards Policy for Information Infrastructure

*Standards Policy for Information Infrastructure (A Publication of the Harvest Information Infrastructure Project) [Brian Kahin, Janet Abbate] on calendrierdelascience.com *FREE* shipping on qualifying offers. Although there are many competing visions of information infrastructure, there is universal agreement that standards will play a critical role.*

Brian Kahin Reviews disparities between the status of men and women in the library field increased at that time. Minor, but annoying typos appear throughout the volume. Reviewed by Carol A. Its 33 papers present a rich case study of the state of standards activities associated with the Global and National Information Infrastructure GII, NII with a particular focus on policy and economic aspects of those activities. There has been increasing recognition that standards and thus standardization activities are the major mechanism by which the vision of interoperability and interconnection will be achieved. Simultaneously, we have also recognized that the domain of standards is complex technically, politically, economically, and culturally. This volume successfully limns that complexity, with individual authors frequently presenting their perspectives on the next steps to manage standards development in directions that will enable the actualization of the NII. The papers have been divided into 6 sections: Contributors run the gamut from academics, to government analysts, to officials of both national and international standards organizations. As this is a proceedings, readers will find some redundance in content and differences in styles, Reviews and will need to use the greatly appreciated index to identify particular aspects of the topic which are of interest to them. In addition to the index, the volume also contains brief biographies of the participants and an acronym list. SO and the authors of this volume all bring, to a greater or lesser extent, an economic perspective to their work. Commingled with the economic perspective is a policy one. This is a key strength of the work as, without a focus on the mechanisms by which standards are developed either within individual standardization activities or more generally at the national or international level , we will be unable to improve the efficacy of these processes. Thus, the specific policy recommendations of a number of the authors are welcome additions to the current discussion on standards. Bear in mind that technology and associated standards change rapidly. Readers should not use this volume to apprise them of the current state of those developments. Instead the works value is in its rich picture of a particular moment in the development of the NII and also in its use of that particular moment to highlight ongoing issues in standards development. I have several complaints about the volume. We learn very little about the workshop itself or its specific purpose there is merely a mention of it in the two page foreword. The reader is not privy to any discussion generated by the presentation of the various papers, discussion which might be quite helpful given that a substantial number of the papers suggest policy initiatives to be undertaken or mechanisms by which standards development might be streamlined. The reader is left to make his or her own conclusions about the feasibility of the various suggestions. Was a policy agenda developed at the meeting? Snow does provide a synopsis in StandardView. In reading the individual papers, I found the thematic grouping unhelpful and instead relied on my knowledge of the authors and the index as guides to what a particular paper might include. Also, as I read the position papers, it was quite clear that some of the authors were stating the official positions of their organizations which were quite valuable contributions to the overall picture but other position papers seemed much more similar to papers in the earlier thematic sections. I was left to conclude that each author Reviews had interpreted the task of writing a position paper differently. A note from the editors would have clarified the distinctions made between types of papers. This volume is well worth investigation by readers interested in either the NII or GII or in standardization generally. By focussing on standardization, it brings to the fore a set of concerns which may be new to readers well versed in other aspects of the NE. For those intemsted in standardization, it demonstrates how general issues play out in a particular context. Some background in standards, economics, and public policy will be helpful as the papers assume that knowledge, but it will be well worth the time to acquire some background to make use of the contributions of these 33 experts. Reviewed by Geoffrey W. With the publication of Scholarb

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Publishing: Several major themes emerge from and cut across the 19 essays collected in this volume. Most comprehensively discussed are the economics of scholarly publishing, the nature of the published work, and the evolving roles of institutions involved in scholarly publishing. Economic structures and stakeholders involved in scholarly publishing are particularlywell covered. Brian Hayes provides potential pricing models for networked publications, and analyzes them from the perspectives of both publishers and scholars, in particular critiquing the notion that the dominant cost in publishing is physical production. Lisa Freeman covers each stage in which publishers add value and discusses how electronic publishing affects each stage. She also includes a welcome plea for further studies of user preferences and needs. Brian Kahin rounds out the discussion with a detailed essay on the intellectual property issues that emerge when the network is regarded as a means of both production and distribution. The book also addresses evolving roles of various institutions in electronic publishing.

Chapter 6 : IT Policies and Standards | NASA

*Standards Policy for Information Infrastructure [Brian Kahin JD, Janet Abbate] on calendrierdelascience.com *FREE* shipping on qualifying offers. Although there are many competing visions of information infrastructure, there is universal agreement that standards will play a critical role.*