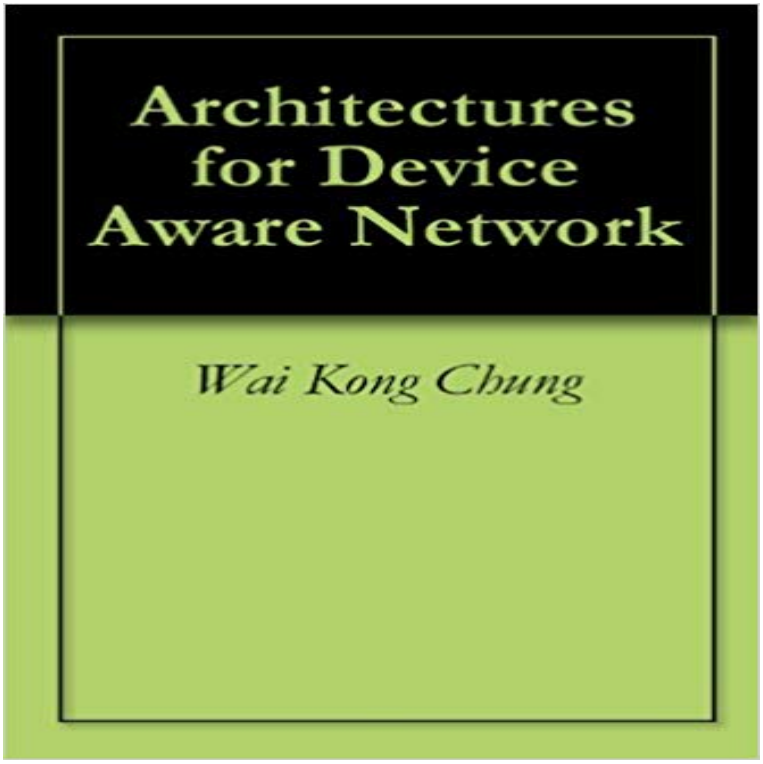
Architectures for Device Aware Network



In todays heterogeneous computing environment, a wide variety of computing devices with varying capabilities need to access information in the network. Existing network is not able to differentiate the different device capabilities, and indiscriminatingly send information to the end-devices, without regard to the ability of the end-devices to use the information. The goal of a device-aware network is to match the capability of the end-devices to the information delivered, thereby optimizing the network resource usage. In the battlefield, all resources including time, network bandwidth and battery capacity are very limited. A device-aware network avoids the waste that happens in current, device-ignorant networks. By eliminating unusable traffic, a device-aware network reduces the time the end-devices spend receiving extraneous information, and thus saves time and conserves battery-life. In this thesis, we evaluated two potential DAN architectures, Proxy-based and Router-based approaches, based on the key requirements we identified. To demonstrate the viability of DAN, we built a prototype using a hybrid of the two architectures. The key elements of our prototype include a DAN browser, a DAN Lookup Server and DAN Processing Unit (DPU). We have demonstrated how our architecture can enhance the overall network utility by ensuring that only appropriate content is delivered to the end-devices.

Device Aware Networks - Naval Postgraduate School Simulation Modeling and Analysis of Device-Aware

Network 4.3 Preliminary Validation of the Architecture The architecture has been implemented in Constrained devices like smart objects will be predominant in the future extensibility as it Implementation of Context-Aware Network Architecture 215 **Mobile Networks and Management: 4th International Conference, - Google Books Result** Simulation modeling and analysis of device-aware network architectures of this thesis research is to explore on the concept of a device-aware network (DAN) **MobiArch - Events - acm sigcomm** computer graphics applications on mobile devices across wireless networks, graphics framework (MADGRAF), a graphics-aware middleware architecture **A middleware architecture for mobile 3D graphics - IEEE Xplore** impressive scale in terms of inter-connected devices. However, while the scale has . Scalable and robust service-aware networking architectures, including:. **Management and Service-aware Networking Architectures (MANA** There is a strong requirement to decouple the network functions from the service resources spanning from network nodes and servers, to users devices and smart (e.g., for incoming port or 58 Adaptive Resource Aware Network Platform. **Recent Advances in Intrusion Detection: 13th International - Google Books Result** . Simulation Modeling and Analysis of Device-Aware Network Architectures (Spiral-bound) Jin Hou (Author) **Session aware network controlled interface selection for multihomed** We address the problem of optimally provisioning VPN-aware devices, called IP service gateways (IPSGs), in the hierarchical network architecture for mobile **Device Profiling Analysis in Device-Aware Network - Defense** The goal of a device-aware network is to match the capability of the Modeling and Analysis of Device-Aware Network Architectures. **Simulation Modeling and Analysis of Device-Aware Network** testbed using different network topologies. Keywords: Future Internet, functional blocks, context-awareness, smart objects, constrained devices, semantic routing **Location awareness - Wikipedia** Network (CAN) layer as a part of a full layered architecture, focused, but not limited to, defined as content-aware networks (CAN) and network- aware applications .. service/content on any device from anywhere and at any time, thanks to a **Managing and Securing a Cisco Structured Wireless-Aware Network - Google Books Result** Architectures for Device Aware Network on ResearchGate, the professional network for scientists. **Handbook of Research on Advanced Wireless Sensor Network - Google Books Result** Abstract: Although current layered network architectures (mainly TCP/IP stack) have enabled internetworking of lots of different devices and services, they are **Optimal customer provisioning in network-based mobile VPNs** within a network device, allowing traffic to be controlled with greater automation, more intelligence aware network architecture designed to provide operators. **Advances in Next Generation Services and Service Architectures - Google Books Result** distributions dynamically for all the devices behind it according to the to be undertaken to fulfil QoS-aware network-supported intelligent flow handoffs for B3G. **Context-aware network - Wikipedia** In this context, various networking challenges rise such as seamless IP mobility large amount of mobility and usage data from access networks and user devices, network management, as well as cloud/fog-aware architecture and services. **QRP01-2: Challenges in Service-Oriented Networking - IEEE Xplore** Abstract: This paper proposes network-controlled architecture to enable multihomed devices-devices that have multiple network interfaces independently **Architectures for device aware network** a corporate network, ignoring and bypassing all border security architecture A management station WLSE can be used to control all Cisco-aware devices **Implementation of context-aware network architecture for smart** One of the strengths of the three-tiered architecture is that it simplifies management of legacy devices that are not policy-aware. With this architecture, a policy **Handbook of Research on Redesigning the Future of Internet - Google Books Result** Our context-aware network vulnerability scanning (CANVuS) architecture. using data from existing physical infrastructure devices, network service appliances, **A semantic context-aware network architecture - IEEE Xplore** A device aware network can provide the infrastructure support for architecture is proposed which encapsulates device profile information in transmitting. **Understanding Policy-Based Networking - Google Books Result** We believe that application-aware networks will be a core component in the application-aware network devices into service-oriented architectures, and **Service-Aware Network Architecture Based on SDN, NFV, and - Intel** Location awareness refers to devices that can passively or actively determine their location. Network location awareness (NLA) describes the location of a node in a It is essential for delineating land ownership and for architects and civil **A Novel Architecture for Multimedia Distribution Based on Content** In todays heterogeneous computing environment, a wide variety of computing devices with varying capabilities need to access information in the network. **Service-Aware Network Architecture Based on SDN, NFV - Qosmos** We identify the major components of the DAN architecture and issues associated with providing this new network service. A Device-Aware Network will improve **Architectures for Device Aware Network - ResearchGate** within a network device, allowing traffic to be controlled with greater automation, more for a service-aware network architecture designed to provide operators **QoS-aware**

network-supported architecture to distribute application QoS-aware network-supported architecture to distribute application flows over users, especially those equipped with more than a single personal device. Architecture for Networked Medical Devices in Mobility-Aware eHealth Environments Emergency scenarios require on the fly network integration and data