Virtualization on a Linux Platform

Professional XEN Virtualization, William von Hagen. Set for publication in November, this book covers virtualization on the Linux platform for administrators who want to optimize the use of enterprise hardware, create virtual environments geared toward specific tasks, or establish a testing environment. The author provides a foundation in virtualization, Xen, and competing approaches. He discusses installing, configuring, and using Xen, including detailed examples of Xen configuration files, system configuration files, and system-level configuration information.

The book offers details that can help system administrators adopt Xen and justify its selection. It also covers optimizing Xen, Xen hosts, and guest operating systems for maximum performance and reliability; using Xen in enterprise data centers; and procedures and considerations for building custom guest operating systems to run as virtual machines on a Xen host.


Virtualization Executive Forum

http://www.infoworld.com/event/virtualization/20070924/vef_resources.html

Maintained by Infoworld, this Web site contains links to various other online resource sites dealing with virtualization.

The Virtualization Executive Forum Spotlight provides access to white papers and other free resources exploring enterprise-wide deployment of virtualization. The Special Report: Virtualization Breaks Out explores how new technology offerings from hardware, software, and OS platform vendors are lowering the barrier to enter server virtualization. The Virtualization Report Podcast is an audio commentary on news in virtualization. InfoWorld’s Virtualization Portal is an online resource with news, blogs, and special reports. IT Exec Connect is an online community for connecting with peers and setting up groups to get connected to speakers and sponsors of the virtualization industry. The Virtualization Report Blog is a collection of news, reviews, and opinions about virtualization. The Enterprise Strategy Newsletter conveys a reading on developments and new issues facing the enterprise. And the Virtualization Newsletter delivers news, opinions, and reviews about the industry every Thursday.

Virtualization Information

http://www.virtualization.info

Virtualization.info was launched 11 September 2003 under the name of Blue Alliance. Originally targeting the emerging market of server virtualization for a worldwide audience, the site also became an aggregator of information about vendors and product availability.

The site receives more than 100,000 page views per month and more than 50,000 feed subscribers per month.

With more than 2,400 pages, virtualization.info is referenced by more than 20,000 other sites, blogs, forums, and newsgroups discussing virtualization. It also offers tools such as the Virtualization Industry Challenges, the Virtualization Industry Radar, the Virtualization Industry Roadmap, and the Virtualization Industry Predictions.
Virtualization

Pearls of Virtualization Wisdom

The Best Damn Server Virtualization Book Period: Including Vmware, Xen, and Microsoft Virtual Server, Rogier Dittner and David Rule. Server sprawl and escalating IT costs have managers and system administrators scrambling to find ways to cut costs and reduce total cost of ownership of physical infrastructure. Combining software applications onto a single server, even if those applications are from the same software vendor, can be dangerous and present problems that are hard to troubleshoot.

Virtualization allows administrators to consolidate many servers onto a single physical server, reducing hardware, electrical, cooling, and administrative costs. These virtual servers run independent of each other so if one crashes, the others are not affected. Planning and implementing a server consolidation is a complex process. This book, set for publication in November, details the requirements for such a project, provides sample forms and templates, and offers several physical to virtual migration strategies to save both time and costs. Readers can learn how to plan and deploy VMware, Microsoft Virtual Server, and Xen.

The book explores how to create a virtual network to exchange information or provide a service to other virtual machines or computers, how to use virtualization to support removable media such as CD or DVD optical disks, and offers tips on reducing server costs, administration overhead, and complexity.


Virtualization Blog

http://vmblog.com

Vmblog.com describes itself as a site dedicated to spreading the word about virtualization and keeping the masses informed about all the latest trends, technologies, and news that relates to virtualization.

The Web site was launched as a project to keep track of what was going on within the IT industry—specifically within the virtualization space.

The site covers topics such as AMD I/O virtualization, application virtualization, desktop virtualization, Fibre Channel SAN, Intel VT, iSCSI SAN technology, Microsoft Virtual Server 2005 and Virtual PC, network virtualization, physical to virtual migration, server virtualization, storage virtualization, VMware ESX Server, GSX Server, VirtualCenter, virtual machine automation, management applications, tools, utilities, virtualization scripts and procedures, books, and resources.

Virtual Organization Network and VE-Forum

http://VE-Forum.org

The Virtual Organization Network (VoNet) has joined forces with VE-Forum.org to provide researchers and practitioners wanting to learn about the key concepts of different forms of virtualization in an online repository of information. The site offers e-JOV (Electronic Journal of Organizational Virtualness), e-News (an online newsletter), and a database of literature (books, articles, and so on). There is also an email discussion list as well as links to other virtual organization sites.

Access to the VE-Forum interest groups and project information is open to anybody visiting the portal. However, registered users enjoy other benefits. They can actively participate in interest groups, project discussion forums, private projects, or work group collaboration spaces, and submit events, news, or projects for public consumption. They also can become part of the community with a listing in the who’s who directory, and have access to a personal area called MyDesk from which they can gain central access to all areas of interest.
Blade Servers and the Enterprise

Blade Servers and Virtualization: Transforming Enterprise Computing While Cutting Costs, Barb Goldworm and Anne Skamarock. The combination of blade servers and virtualization provides flexibility, high availability, and manageability to deliver services on demand to users anywhere, anytime. Guiding readers through these two technologies, this book shows why the authors believe the technologies are becoming key foundation building blocks for the next generation of data centers.

The authors explore what they view as the benefits of blade servers and virtualization, presenting readers with an architectural view of each. They also analyze major offerings along with case studies and tips for selecting products.

The book helps assess the needs of a company and determine whether blade servers and virtualization are the right choices. It offers tips on how to use the blade server systems and components, analyzes the approaches and architectures of alternatives, compares different vendor solutions, offers insight to help decide on hardware, system software, and data center facilities, and shows how to successfully integrate blade servers and virtualization into your production environment.


2007 Virtualization Conference and Expo

12-13 November 2007
San Francisco

A fundamental technological innovation that allows skilled IT managers to deploy creative solutions to business challenges, virtualization is a methodology whose time has arrived. It enables IT and business managers to rise to the challenge of using their enterprise computing infrastructure as cost effectively as possible while remaining responsive in supporting new business initiatives and flexible in adapting to organizational changes.

Virtualization of distributed computing, of IT resources such as storage, bandwidth, and CPU cycles, are all increasingly significant within enterprise IT; virtualization can also apply to a range of system layers, including hardware-level virtualization, operating system level virtualization, and high-level language virtual machines. Projections are that the virtualization services market alone will reach US $11.7 billion by 2011. In short, virtualization is fast becoming a key requirement for every server in the data center, enabling increased workloads in server consolidation projects, efficient software development and testing, resource management for dynamic data centers, application rehosting and compatibility, and high-availability partitions.

The SOA World Conference and Expo’s Virtualization Forum part of this conference covers the booming market of virtualization for the enterprise. Program topics will include hosted virtualization, para-virtualization, virtualization hardware support, hardware-level virtualization, storage virtualization, virtualization for server consolidation and containment, desktop virtualization, windows virtualization, and utility computing.

http://www.virtualizationconference.com/

eChallenges e2007

24-26 October 2007
The Hague, Netherlands

This conference will focus on applied ICT research topics addressing societal and economic challenges. The program will combine keynote presentations, technical and policy papers, case studies, workshops, an exhibition, and social activities. The program will also showcase results from projects funded at national and regional levels as well as those funded by European Commission Research Programs.

Conference organizers expect to cover topics such as ICT for networked enterprise, eGovernment and eDemocracy (services to citizens and business), organizational transformation, eHealth (health information systems), collaborative working environments, knowledge and content technologies, security and identity management, and technology-enhanced learning and skills.

Attendees will be able to attend seminars and discussion groups on topics such as i2010 and ICT take-up by SMEs, digital content and digital rights management, eVoting and eParticipation, eTourism and cultural heritage, knowledge management and technologies, interoperability and standardization, and smart and virtual organizations.

http://www.echallenges.org/e2007

IT Pro Resources

If you have a book, event, or Web site you’d like IT Professional to include in Resources, send information to itproducts@computer.org for consideration. We can’t promise to include all submissions, but we will review them.
Large Scale Development

Software Engineering, Hans van Vliet. Developing software today often involves working on large programs as a member of a team that will most likely collaborate with other individuals in other disciplines and other teams, and which may interact over several years. Learning the principles and practice of software engineering is as much about understanding this context as it is about specific tools and techniques.

This book, set for publication in March 2008, and updated to cover developments such as UML and software architecture, draws out several important themes and essential changes in the field of software engineering: the human and social aspects of technical subjects, the importance of looking beyond current practices, and the ability to take lessons from the failures and successes of technologies.

Written for use on a wide variety of software engineering courses and modules, the book is also for people actively involved in software development and maintenance—programmers, analysts, project managers—who want to keep abreast of the problems incurred by large-scale software development, and what solutions have been proposed.


Software Patterns

Patterns for Fault Tolerant Software, Robert Hanmer. Software patterns have revolutionized the way developers and architects think about how software is designed, built, and documented. This book, set for publication in December, presents techniques to achieve patterns for fault tolerant software.

The author guides readers through concepts and terminology—through common principles and methods, to advanced techniques and practices in the development of software systems. References provide access points to other literature, including descriptions of applications of each technique.

Organized into a collection of software techniques, readers can find specific techniques in sufficient detail to allow appropriate choices for designing the system.


GNU Development Resources

http://www.gnu.org/software/devel.html

This page describes the development services available for GNU developers on GNU Project machines. Visitors wishing to make use of one of these services for development of a GNU package are asked to contact the address listed for the particular service on this site.

A link to Information for GNU Maintainers provides full details of the privileges and responsibilities of GNU maintainers. The GNU Coding Standards, also linked to from this site, provides an overview of what it means to be a GNU package.

With the abundance of inexpensive computers that can run GNU/Linux, as well as the greater availability of Internet access, many GNU volunteers today have all the computer facilities they need. However, there are still advantages to having central computers where GNU volunteers can work together without having to make their own machines accessible to others.

For that reason, the Free Software Foundation encourages GNU software projects to use the machines at gnu.org as a home base. A resources section on this page provides links to help a priority project, help revise GNU licenses, information on free GNU/Linux distributions and the Free Software Directory, and details about GNU software packages.

DaniWeb Community

http://daniweb.com

DaniWeb is a community of 192,963 software developers, Web developers, Internet marketers, and other tech workers who use the site for making contacts, networking, and exchanging ideas. If you are in the IT industry or are just a technology enthusiast, you might find just what you’re looking for at this site. Registration is free and visitors can use all the interactive features of the site.

The main page features a blog section of recent entries. Along the left side of the page, the site arranges its various topics for forum discussion. The software selections include offerings on C, C++, C#, Java, VB.NET, Python, Perl, Assembly, Pascal and Delphi, Visual Basic 4/5/6, legacy and other languages, computer science and software design, game development, and a software developers’ lounge.

Other features include a links directory and IRC chat network.
Design for Reuse

Designing Hardware and Software for Reuse: A Handbook for Embedded Engineers and Programmers, Michael Fowler. “Design reuse” refers to the development of a piece of a design, whether hardware or software, that can then be used in additional designs.

Although reuse has been a standard in the software world for many years, it’s not a prevailing practice for embedded systems. Many designers believe that each embedded system project has so many quirks and individual design features or limitations that trying to design hardware or software modules for reuse on many different designs would lead to dire consequences, such as memory overuse or unpredictable execution times. However, the author believes this picture is changing rapidly, as more and more complex controllers and systems-on-chip are being used in embedded designs, requiring more design time and overhead.

Many manufacturers and designers of embedded products are now looking to design-for-reuse (DFR) techniques to save money and bring products to market quicker. This book, set for publication in December, presents design-for-reuse information and techniques using popular embedded hardware and software tools and platforms. The author provides details on selecting and using the proper tools from a DFR standpoint. Case studies of actual product designs illustrate the principles presented. A main focus of the book is the use of open source tools in DFR, a trend that the author says has become widespread in the embedded industry only recently.

Included in this book is a tutorial covering installation, configuring, and use of the open-source GNU Compiler Collection under Windows to build software applications for ARM-core based platforms such as the Palm, the Gameboy Advance console, and a variety of ARM development boards such as Motorola’s DragonBall MX dev board, Intel’s X-Scale dev board and Atmel’s new AT91 family of development boards. All source code is provided on the accompanying CD-ROM.

PMI Global Congress 2007—North America

6-9 October 2007
Atlanta

Project management, one of the fastest growing career paths in the US, is the chosen career of thousands of IT professionals. Employers are constantly seeking qualified project managers to support the many facets of their business. The PMI Global Congress 2007—North America will provide project management professionals the opportunity to educate themselves on global issues and trends.

The conference offers attendees more than 140 educational presentations within 12 areas of focus to meet a variety of career development paths. Some of this year’s areas of focus include advanced project management skills, communications, consulting skills, general business skills, industry specific issues, new project management issues, sales and marketing skills, and teaming.

Within each of the areas of focus, a variety of presentation formats will be offered. Formats include case studies (detailed information about a real-life situation provided), forums (discussion hosted by a facilitator), guided-design sessions (small groups solve open-ended problems), lectures (a widely used form of instructional delivery), panel discussions (moderated sessions where as many as three presenters give information or their views on an assigned topic), and simulations (abstract representations of real-life situations that require attendees to solve complex problems).

With nearly 250,000 members in more than 160 countries, the Project Management Institute (PMI) is the leading membership association for the project management profession. PMI is engaged advocating for the profession, setting professional standards, conducting research, and providing access to information and resources.

http://congresses.pmi.org/NorthAmerica2007/

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