

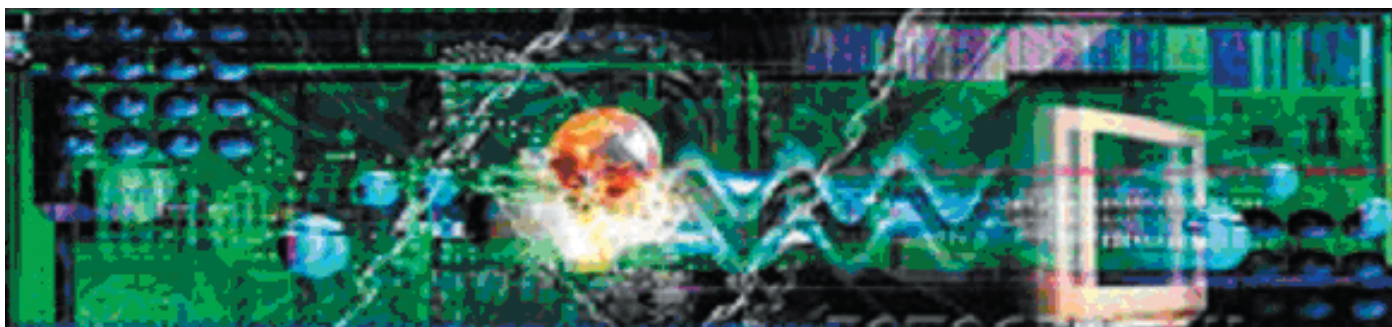


Jericho Forum™

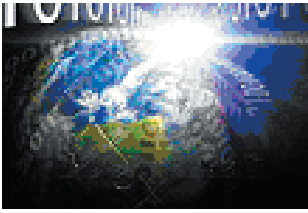
An Overview and How to Get Involved

We need to develop a new security architecture and design approach that will enable business to grow safely and securely in an open, Internet-driven, networked world.

Members of the international IT security thought-leadership group – The Jericho Forum – are working together to drive and influence development of security solutions and open standards that support de-perimeterization.

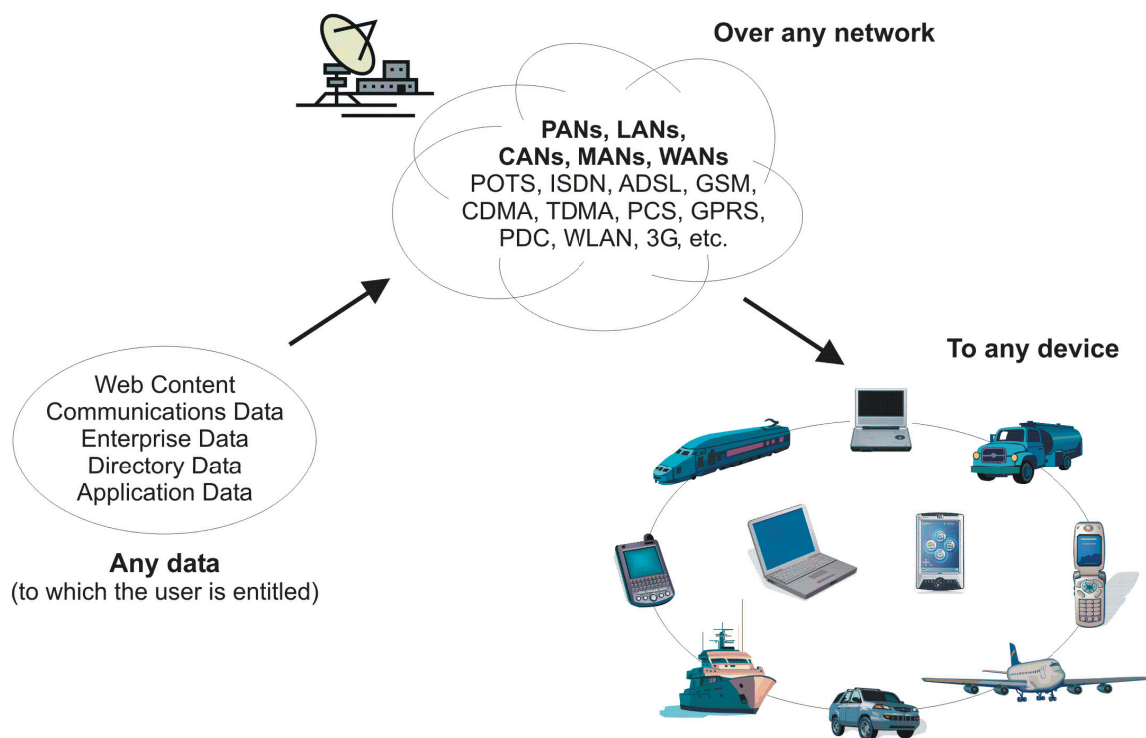


• **SEE THE FUTURE** •



Organizations are increasingly recognizing that traditional security mechanisms no longer meet today's tougher demands for conducting business across an open, extended-enterprise environment. A new model is needed: one that enables business to embrace the Internet and to securely exploit public infrastructure and services directly within the organization's technology and business boundaries. Such a model would connect an organization and its business processes to all external stakeholders, seamlessly and securely, enabling employees, suppliers, and customers to collaborate anytime, anywhere, and at the lowest cost to all.

This is a radical vision – perhaps, some will say, impossible. But the Jericho Forum believes it to be the right one to embrace. Why? Because Jericho Forum members understand the benefits and many have already demonstrated benefits from implementing the first steps towards this goal. And, what's more, the Jericho Forum has already identified the key business and technology drivers that will shape the realization of the new model. So it's now time to all work together to turn this vision into reality: working with vendors to develop the enabling technology, and with business partners to plan and realize its implementation.



• **JOIN THE JERICHO FORUM** •

The future will not invent itself! The Jericho Forum needs forward-thinking individuals and organizations to contribute: to demonstrate the true level of demand for our vision and to determine how that vision will unfold. Our vision applies to all types of organization: public, private, large, small, academic, and not-for-profit. There are no barriers! Don't wait to follow the technological lead of your business partners. In the collaborative business world of the future, all organizations need to work together to develop the future technology roadmap. And the more organizations and individuals that come together to make their voices heard, the more powerful and more coherent will be the message to technology vendors. The Jericho Forum will enable you to understand, develop, and implement the emerging standards ahead of your competitors. Interested? Then join us now!

The Jericho Forum welcomes membership enquiries and runs an annual public conference and other open events to describe and discuss the work it undertakes. All end products of the Jericho Forum's activities are published under copyright, but are freely available to download from the Jericho Forum website.

Please visit www.jerichoforum.org for details of membership terms and conditions, and annual subscriptions. The website also advertises Jericho Forum meetings.

• WHAT ARE THE BARRIERS TO OPEN NETWORKING? •



Many people believe that the Internet – originally designed by the US Government to survive nuclear attack – is itself the beginning and the end of the security problem. Though secure in terms of survivability, it was built to connect trusted participants and systems – hardly applicable to today’s Internet with its ever-increasing usage and hacking, viruses, worms, identity theft, and denial-of-service attacks. These threats are more than a nuisance – they are motivated by criminal intent and they cause real harm to people and organizations. But if secure collaboration and commerce across the Internet is so desirable, then why haven’t technology vendors already responded to the market demand and developed suitable solutions? Here are three reasons why not.

► Lack of applied business knowledge

Successful technologies need the right incentives to succeed. The dot com era demonstrated that clever security technology alone is not enough. Many products came and went without achieving major sales. Security vendors need to embrace practical business models that are scalable and make sense to people and organizations. So there’s a need for vendors and user organizations to work together to establish the definitive security, technology, and business models for the new Internet world.

► Lack of specific incentives and design drivers

Despite the growing threats of hacking and malicious software, we have not made sufficient progress in engineering the security we need to support today’s high-performance distributed systems. The problem space is broad, including specialist security subjects such as cryptography and encompassing the whole system development lifecycle. In recent years we have seen a rise in attacks on specific applications and Internet-based services, targeting data and transactions. Applications and services that were designed for a closed environment are attractive targets for attackers. Fixing this is a tough call for users and vendors alike. It is one of the central challenges in IT. New incentives are needed to tackle the priority areas that will deliver practical solutions.

► Lack of standards

Actually, there is no shortage of standards. Rather, the problem is that we lack ones that are universally agreed, supported, proven, and interoperable. Standards need to be embraced by all technology vendors, not just the ones that happened to sit on standards committees. Good standards enable organizations to avoid vendor lock-in and support changing business needs. Standards need to be more than the lowest common denominator. They should enable agility, innovation, and interoperability. The Jericho Forum seeks practical solutions – driven by real business demands – that take full account of people and processes, not just technology.

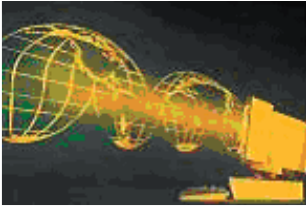
Jericho Forum Challenge

The Jericho Forum runs the annual *Jericho Forum Challenge*, a competition to demonstrate practical security solutions, either by paper or by live trials.

The first Jericho Forum Challenge was held in 2005, and the results were announced at BlackHat Las Vegas in the US.

Further information about this event is available at www.jerichoforum.org.

• WHAT DO WE MEAN BY DE-PERIMETERIZATION? •



The Jericho Forum coined the term “de-perimeterization” to emphasize the trend away from the conventional thinking that focuses on security at the network boundary – security that is “hard on the outside and soft on the inside”. A move away from the tradition that if you want to communicate outside the organization, then you must rely on perimeter firewall devices for your security.

► Does that mean that firewalls are necessarily bad?

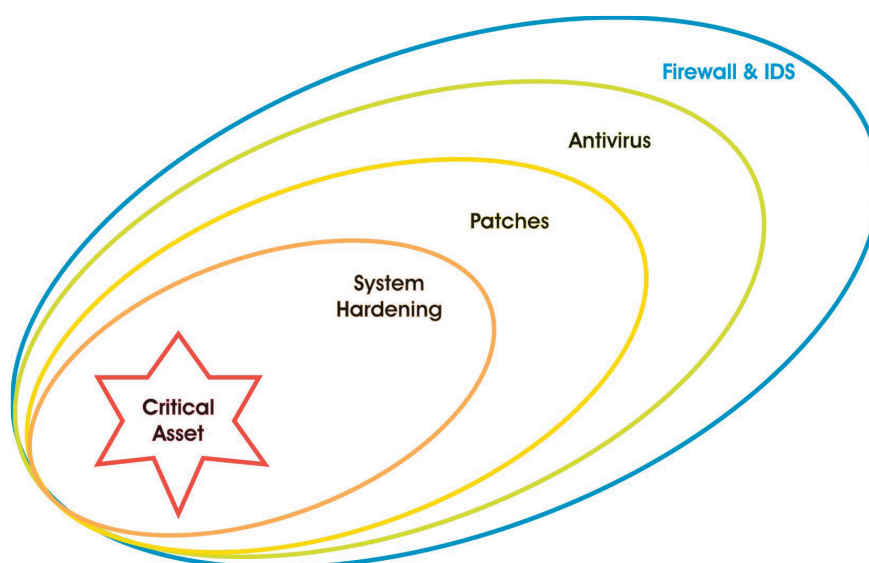
Not at all! We simply want to dispel the long-held belief that the firewall is the best place to implement security. The word “Jericho” reflects the biblical image of the City whose walls came tumbling down leaving its inhabitants exposed to an imminent outside threat. The Jericho Forum sees firewalls as just one of a number of ways to help to achieve secure electronic collaboration and commerce. Most importantly, we see a strong need to focus on alternative solutions that are more effective in achieving the vision.

► Is de-perimeterization the right term?

It’s not the prettiest, that’s for sure! Nor is it the only term. Equivalent ones have been coined such as radical externalization and boundaryless information flow. But we like it because it’s a strong word that has sparked – and continues to provoke – a much-needed public debate. It’s effective so it’s here to stay. Unless of course we find a more effective word!

► Isn’t the true evolution towards multiple boundaries and perimeters?

Yes, we see new perimeters forming and extending into computer platforms, software applications, and around the data itself. “Micro-perimeterization” is a term that describes this trend quite well. The Jericho Forum sees de-perimeterization as a concept or strategy to describe the protection of an organization’s systems and data at multiple levels, by exploiting a combination of cryptography, inherently-secure protocols, inherently-secure systems, and data-level authentication. Successful implementation of a de-perimeterized strategy within an organization implies that the protection of the outer security boundary could be removed without significant risk to the assets of the organization.



• WHAT ARE JERICHO FORUM MEMBERS DOING THEMSELVES? •

▶ Royal Mail

Royal Mail Group has adopted de-perimeterization and federated identity management as long-term strategic goals. Their journey has begun. New layered controls, such as real-time vulnerability scanning, have been introduced. A new Systems Development Life Cycle methodology – with tougher security demands – is being implemented, and critical platforms and legacy applications are being progressively hardened. A new desktop architecture has been designed to enable a range of new enterprise security services to be implemented in support of de-perimeterization.

▶ BP

BP has a business environment in which every business process requires flexible working and unfettered communication with business partners, governments, and other third parties. To support this model, the company has committed its five-year digital architecture plan to make as many new applications as possible Internet facing and steadily move a large client systems portfolio onto the Internet. Almost 20,000 users are in the initial migration which is almost half completed and they are seeing business flexibility and cost savings from user mobility in choice of wireless networks, and simplification in security management through self-protecting clients. Their next phases include externalization of identity management through federation and finding more ways of presenting legacy systems to the Internet without having to introduce third parties onto the remaining corporate network.

▶ ICI

Key parts of ICI's business are already embracing the de-perimeterization vision and using it to make significant savings. ICI's involvement with the Jericho Forum has demonstrated that vendors will listen if the user community communicates clearly, articulating with a single voice what they need.

▶ Standard Chartered Bank

Standard Chartered Bank is actively applying the Jericho Forum's design principles in a new network architecture that will greatly improve network connectivity and business application access across its branch network at a significantly lower total cost. This addresses the Bank's need to do business in regions where sourcing network bandwidth and interconnection are challenging, as well as providing a shorter time-to-market to exploit developing business opportunities.

▶ Rolls-Royce

In 2005, Rolls-Royce embarked on a two-year rollout of a global computing and communications infrastructure to replace a patchwork of legacy star networks and site-specific systems. The key business drivers are the increasing levels of collaboration for new product development with risk and revenue sharing partners, the company's focus on global consistent business processes and quality standards, and the growth of the company's aftermarket services business, with over 200 nodes of their global network being collocated with key customers and suppliers. This has led to them implementing new applications in externally hosted environments, as well as operating multiple network security classes in order to manage varying levels of trust and protection.

▶ Qantas

The Qantas Group recognizes that its business model and business processes are undergoing significant change. There are new opportunities to create value through business-to-business transactions with customers, partners, and suppliers. These opportunities extend IT-enabled processes beyond traditional boundaries and have become cost-effective through application of Internet-enabled technology. Qantas IT participates in the Jericho Forum in order to influence and be informed by the IT security standards, tools, and techniques that protect the confidentiality, integrity, and availability of information in this emerging business model of an extended enterprise.

• **WHAT ARE THE GOALS? WHAT BY WHEN?** •

▶ **Vision Statement**

To enable business confidence for collaboration and commerce beyond the constraint of the corporate, government, academic, and home office perimeter, principally through:

- Cross-organizational security processes and services
- Products that conform to open security standards and profiles (collections of logically related standards that make up a useful functional entity)
- Assurance processes that, when used in one organization, can be trusted by others

Note: The Jericho Forum is business-driven, but recognizes that the issues it aims to tackle affect all types of organization and individuals. Issues such as privacy and civil liberty can be just as important as the needs of the corporate.

▶ **Mission Statement**

Act as a catalyst to accelerate the achievement of the collective vision, by:

- Defining the problem space
- Communicating the collective vision
- Challenging constraints and creating an environment for innovation
- Demonstrating the market
- Influencing future products and standards

Note: The Jericho Forum will produce standards where there are gaps to fill, but primarily seeks to foster development of standards within complementary institutions; e.g., W3C, IETF, ISO.

▶ **Timetable**

A period of three to five years for the achievement of Jericho Forum's vision, whilst accepting that its mission will continue beyond that.

▶ **Not Just Technology**

The Jericho Forum recognizes that de-perimeterization may appear radical, and there is more to enabling change than standardizing relevant vendor technology. Also needed is appropriate guidance on:

- Governance issues: how organizations should prepare for and guide de-perimeterization, including consideration of interoperability with other organizations
 - Strategic contexts: understanding relevant business drivers and requirements, as well as the principles, techniques, and processes to turn business requirements into solution designs
 - Requirements frameworks: common languages to express de-perimeterization goals, requirements, policies, and solutions
 - Business frameworks for collaboration and commerce between organizations: defining required trust relationships and assurance
 - Security frameworks: defining security requirements in a standard way by classifying all elements involved in collaboration and commerce that may have a bearing upon de-perimeterization
 - Design frameworks: addressing security architecture and design holistically for all information and communications technology elements required
 - Implementation and operation: defining relevant roles and responsibilities
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• HOW DOES THE JERICHO FORUM WORK? •



The Jericho Forum has three working groups, overseen by a Board of Management. Working Groups are open to any member to join, but the Board is restricted to customer (end-user) member organizations. Publications from the Jericho Forum similarly require Board approval. This ensures that while technology vendors can participate fully in all our activities, the Jericho Forum remains customer-led.

Each Working Group works on issues related to the Jericho Forum's vision and mission. Working Group activities are guided by Jericho Forum principles, these being the highest level of expression of solutions to the issues it considers.

Principles may:

- Define technical or other attributes of applications, systems, or architectural components
- Be recipes for system, application, or architecture development, and so relate to the process of implementation/ evolution rather than a property of the implemented artifact
- Link to issues so that stakeholders can see the benefits of adopting each principle

A principle may be strict (depended upon by other principles, or form the rationale for a particular Jericho Forum standard), or simply be an expression of good practice.

The Jericho Forum either endorses standards produced by other groups or defines the need for new ones. The Forum encourages development of Technical Standards, which may include abstract models, protocol definitions, and application programming interfaces (APIs), if required, in collaboration with vendors, research groups, and academia as appropriate.

The Jericho Forum also formulates Business Scenarios, the goal being to illustrate the relevance of the principles and standards and their value. A fully specified scenario would identify business processes or application(s), underlying business and technology environments, the actors involved, and the goals and outcomes that stakeholders in the scenario expect.

► Working Groups

The Jericho Forum has established three Working Groups:

- Requirements Working Group – This group ensures that the Jericho Forum vision is analyzed and clearly articulated, by defining business principles and scenarios that define de-perimeterization and its relevance to organizations' business goals – the what, where, and when of de-perimeterization. Requirements are agnostic to technology, design, and implementation approaches that organizations may best use. This Working Group needs participation from experienced business and technology authorities and analysts.
- Solutions Working Group – This group identifies the technology and standards, and management and monitoring, needed to achieve the Jericho Forum vision and mission, via both immediate and near-term implementations of available technology and looking to the longer-term evolution of Technical Standards (both *de facto* and *de jure*) and vendor roadmaps. We can characterize all this as the “how” of de-perimeterization. It needs involvement of senior technologists from all types of IT user organizations, and is the main focus for vendor members of the Jericho Forum.
- Stakeholders Working Group – This group ensures that the Jericho Forum engages with the “movers and shakers” in relevant business, government, pan-government, citizen, academic, technology, business venturing, and security communities. The Jericho Forum's key message is that de-perimeterization is with us now, and we have to respond by providing appropriate and effective IT security mechanisms in our extended-enterprise Internet-driven world. Stakeholders have the task of taking this message to business decision-makers. This Working Group needs the participation of strategic planners, industry and academic commentators, security figureheads, writers and journalists, research analysts, and technology evangelists.

Each Working Group has a leader and works through a mixture of teleconference, web sharing, and face-to-face meetings.

• **ACADEMIC RESEARCH & SPONSORSHIP** •

The Jericho Forum welcomes enquiries regarding research proposals and projects. We do not currently offer research grants, but we are able to consider offers of benefit in kind research from qualified institutions and individuals, as an alternative to formal membership. Acceptability of proposals will depend on their alignment with specific topics under investigation in one or more of the Jericho Forum's Working Groups.

• **STANDARDS LIAISON & LINKS** •

The Jericho Forum liaises with other standards-related organizations via the common membership of individuals or organizations. We do not therefore offer affiliations.

The Jericho Forum's members are currently also active in organizations and groupings pursuing related objectives, including UK Council for Electronic Business, Information Security Forum, I-4, The Infrastructure Forum, The Open Group, Network Applications Consortium, and Standards Australia.

• **ABOUT THE JERICHO FORUM** •



The Jericho Forum aims to drive and influence development of security standards that will meet future business needs for secure Information and Communications Technology (ICT).

These standards will facilitate the secure interoperation of ICT to support collaboration and commerce over open networks, within and between organizations, based on a security architecture and design approach entitled de-parameterization. Globally, more than fifty blue-chip user organizations, from all sectors, are working together in order to find a solution and numerous security product suppliers keen to understand the problem space have joined them. The Open Group hosts the Jericho Forum.

• **ABOUT THE OPEN GROUP** •



The Open Group is a vendor-neutral and technology-neutral consortium, which drives the creation of Boundaryless Information Flow™ that will enable access to integrated information within and between enterprises based on open standards and global interoperability. The Open Group works with customers, suppliers, consortia, and other standard bodies. Its role is to capture, understand, and address current and emerging requirements, establish policies and share best practices; to facilitate interoperability, develop consensus, and evolve and integrate specifications and open source technologies; to offer a comprehensive set of services to enhance the operational efficiency of consortia; and to operate the industry's premier certification service. Further information on The Open Group can be found at www.opengroup.org.

• **FOR MORE INFORMATION** •

Visit www.jerichoforum.org for further information, including our Frequently Asked Questions (FAQ) and other papers that elaborate upon the themes introduced here.

To contact the Jericho Forum, please email:

jerichoforum-interest@opengroup.org