



Promoting Economic Growth  
through Smart Global  
Information Technology Policy

The Growing Threat of Local Data  
Server Requirements

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# I. Introduction

As CEOs of leading companies, Business Roundtable (BRT) members agree that for American companies of all sizes to prosper in the global economy — and continue to grow and create jobs for American workers — the United States must have in place a competitive policy framework that fosters innovation and facilitates the productive use of information and technology.

BRT's policy paper *Taking Action for America: A CEO Plan for Jobs and Economic Growth* provides a comprehensive plan to put the United States back on the path of strong economic growth through actions that include opening foreign markets, protecting America's cyber interests, and ensuring that U.S. companies and workers are not disadvantaged by discriminatory foreign policies such as local preference requirements.

This paper builds on the BRT plan by closely examining one critical and actionable aspect of global information technology (IT) policy: the growing international risk of government-imposed limits on cross-border data services through local data server requirements. This trend is bad for U.S. technology and commerce and, in turn, bad for economic growth and job creation. This paper recommends concrete actions that the U.S. government and BRT companies can take to oppose these requirements wherever they arise.

## II. Issue Overview: Preventing Local Data Server Requirements

For decades, the United States has led the world in advocating policies that open markets and reduce regulatory barriers to commerce. Such policies are all the more important today given the integration of networked technologies into global business models and the positive impact these business models have on the creation of U.S. jobs and economic growth. Globally networked technologies, such as the Internet, cloud computing, virtual private networks and mobile commerce, are critical to modern business. These cross-border network technologies have created the most profound platform for worldwide commerce in history.

BRT and our members are concerned about a dangerous trend we are experiencing as we conduct business around the world. Governments are beginning to erect new counterproductive, overreaching regulatory barriers to services that rely on cross-border, information-driven business models. We want to raise awareness of the potential damage these policies could cause, and we encourage business and government to work together to implement policies to mitigate such risks.

BRT is focusing first on the emerging trend of local data server requirements, i.e., requirements to mandate server infrastructure within the borders of a country, rather than allowing businesses to use servers located in other countries. Such policies are disruptive and an unnecessary drain on resources. They can fragment the unified, economically efficient and technologically flexible nature of global networks such as the Internet. We want to work with the U.S. government to identify these threats and to advance practices that minimize the barriers to open markets here at home and work with other governments to adopt the best practices embodied in the E.U.-U.S. Trade Principles for Information and Communication Technology Services.<sup>1</sup>

The United States has already recognized the harm that can be done to global business and consumer experiences by blanket local data server requirements. For example, the [E.U.-U.S. Trade Principles for Information and Communication Technology Services](#) and the [Organisation for Economic Co-operation and Development \(OECD\) Principles for Internet Policy-Making](#) (see page 8) both discourage requirements for needlessly replicating infrastructure locally. We agree with these principles. We encourage the United States to more specifically confirm its implementation of these principles and to advocate their adoption by other countries around the world.

### III. Threats Posed by Local Data Server Requirements to the Benefits of Global Operating Models

**The advent of cross-border networked technologies, such as cloud computing and mobile commerce, has enabled a new age of global efficiency.**

Network-based technological developments have enabled companies to virtualize their data storage and processing facilities and scale them as needed to service global markets, without replicating the infrastructure in every market where they have a supplier or customer. These scalable systems lower capital risk, expedite transaction processing, facilitate innovation, and make it easier to bring services to new markets quickly and efficiently. Such systems do not foreclose local investments. In fact, by integrating countries into a seamless global network and expediting the provision of services to global markets, networked operations can spur the development of local businesses that consume such services and enhance consumer welfare.

**Open markets and globally networked technologies are critical to the success of U.S. businesses of all sizes and across economic sectors.**

Even in the current global economic environment, U.S. business excels due to its ability to harness the efficiency gains made possible by network-based technologies such as cloud computing and centralized processing centers. Network-based technologies are critically important to businesses as diverse as electronic retailers, search engines, financial services, insurance, logistics and transportation, social networks, energy suppliers and utilities, web hosting providers, registrars, and technology infrastructure and service providers that rely on the Internet and other global telecom networks. Universities, research institutions, hospitals and other organizations also rely on unified technology platforms.

Networked technologies are also essential to small businesses, nonprofits and entrepreneurs. Thanks to the Internet and advances in technology, small companies, nongovernmental organizations and individuals can customize and rapidly scale their services at a lower cost and collaborate globally. Improved access to networked technologies also creates new opportunities for entrepreneurs and innovators to design applications and to extend their reach to new international customers.

**But the very future of these globally networked technologies and the efficiency-based cross-border services business models they support are at risk.**

These beneficial technologies will not thrive if unwarranted regulatory barriers impede them. Unfortunately, a growing number of countries are adopting or considering such barriers. One example is the requirement to locate data servers locally. Local data server requirements mandate that businesses use in-country servers and storage facilities to host all data that flow into and out of that country. In the most extreme examples, the requirements prohibit storage of data concerning a country's nationals on any server outside the country.

*Local data server requirements hurt economic productivity and dramatically undercut the efficiencies and scalability made possible by cloud computing and networked technologies.*

Local data server requirements hurt economic productivity and dramatically undercut the efficiencies and scalability made possible by cloud computing and networked technologies. The disruption caused by such requirements can undercut the ability to conduct business with a country and shut out any business that does not have an existing large, local presence. At times, these measures serve to protect local interests at the expense of international competition. Such restrictions may make it more difficult to integrate even large countries into the global supply chain and may stifle the deployment of cutting-edge innovative services to the detriment of consumers.

The negative impact of local data server requirements on productivity, efficiency and scalability manifests itself in higher operating costs for business. To comply with restrictive policies, businesses may endure increased capital costs — for example, the purchasing of additional servers. The policies further burden businesses because capital expenditures such as server purchases require new operational spending on software licenses, additional employees and additional hardware.

Local data server requirements diminish a business's ability to manage data effectively. Data housed in restrictive countries are isolated and can become more difficult to manage, secure, access and govern. In this way, local data server requirements can greatly and unnecessarily increase the cost and security of supply chains at a time when cyber and physical security are increasing priorities for both the private and public sectors. Data server location mandates also add to a company's regulatory and legal compliance.

When local data server requirements are not definitive in their scope, they can have unforeseen serious negative impacts on business models. For example, prohibiting data concerning a country's nationals from being stored outside of the country could prevent activities as critical as businesses' central directories. Similarly, when taken to the extreme, a policy that demanded local presence for data servers could be interpreted to require local infrastructure in a country where a business's website was accessible. This creates an unmanageable situation for all businesses but especially U.S. small and medium-sized companies that we want to grow and thrive by reaching new customers around the world.

## **Local data server requirements have negative consequences for countries' economic growth.**

*Companies from more closed markets will have an unearned advantage in profiting from the coming services and infrastructure boom if the governments of more open markets do not press for standards against barriers such as local server data requirements.*

When governments impose blanket restrictions on trade such as local data server requirements, they fight the battle for economic growth with one hand tied behind their backs. The service economy accounts for nearly 70 percent of both world economic output and world employment, and yet these barriers restrict the potential of businesses to deliver increased productivity and growth at a time of a crucial, fragile economic recovery in much of the developed world. When trade barriers disrupt the free flow of lawful information, they can result in a slowing of technological innovation and prevent companies from offering certain products and services, consequently dampening economic growth.



These restrictions on services trade also have a negative impact on growth specifically in developing countries. Services trade is a conduit for leapfrogging the traditional path of economic development (the “agriculture to manufacturing to services” model). In the 21st century, nations have the potential to advance directly into services at an internationally competitive level, due to the scalability and efficiency of IT platforms such as the Internet and other global networks. But barriers such as local data server requirements limit these prospects.

We are concerned that the disruptions that local data server requirements and other services trade barriers bring to global economic growth are set to increase. Experts expect a coming boom in services and infrastructure spending as the world moves beyond the financial crisis. However, barriers to services trade will diminish the potential for growth. Additionally, because services trade policies differ across countries, some countries’ potential for growth will be affected more negatively. The United States and the European Union are mostly open, while several of the developing nations are not. Companies from more closed markets will have an unearned advantage in profiting from the coming services and infrastructure boom if the governments of more open markets do not press for standards against barriers such as local server data requirements.

### **Local data server requirements present current and emerging threats.**

The following are examples of this emerging threat, in which governments either are proposing or have implemented local data server requirements. This list is not exhaustive, but rather illustrative, and demonstrates the harmful trend that should be recognized and reversed. In some examples (not all), the stated rationale for the law is a broad national security concern, yet there are indications of an industrial policy motivation. The examples are provided from the collective knowledge and experience of BRT member companies.

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**Australia** The government presented a bill in November 2011 that would require local data centers for the personally controlled e-health record system.

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**Brunei** Brunei has data residency laws, meaning that companies can store the data they collect only on servers in country.

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**China** China has local data server requirements due to national security, currency control and industrial policy. China has also put in place an array of laws and regulations that establish a local entity, China UnionPay (CUP), as the monopoly network for processing RMB-denominated transactions in China.<sup>2</sup> The United States is currently challenging the CUP monopoly in the World Trade Organization. If the United States prevails, then it must ensure that China does not seek to perpetuate the entrenched position of CUP by imposing a local data server requirement. China has data residency laws that declare companies can store the data they collect only on servers in country.

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**Greece** In February 2011, Greece passed a law that states, in part, “Data generated and stored on physical media, which are located within the Greek territory, shall be retained within the Greek territory.” The European Commission has criticized this action by Greece as inconsistent with the E.U. single market, but the rule remains in effect.

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<b>India</b>	The government has proposed a measure that would require companies to locate part of their IT infrastructure within the country to provide investigative agencies with ready access to encrypted data on their servers. This measure also will require that data of Indian citizens, government organizations and firms hosted on the servers of these companies not be moved out of the country. Failure to comply with this rule will be a criminal offence and company officials will face prosecution.
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<b>Indonesia</b>	In 2009, the Ministry of Communication and Information Technology of the Republic of Indonesia proposed a draft government regulation to implement law no. 11 (2008) concerning electronic information and transactions. One of the provisions, article 25.3, stipulates that every electronic system's provider for public services that operates a data center is required to locate its data center and disaster recovery center within the Indonesian territory. This draft regulation will become law if it is "harmonized" with the Ministry of Justice and the Ministry of Economic Affairs.
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<b>Malaysia</b>	Malaysia passed a local data server requirements law but has not yet implemented it.
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<b>Nigeria</b>	Nigeria has adopted Guidelines on Point-of-Sale Card Acceptance Services, which require that all point-of-sale and ATM domestic transactions be processed through a local switch (essentially, a server) and prohibit routing of transactions for processing outside the country. The guidelines also require centralized switching of domestic transactions.
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<b>Russia</b>	Russia has adopted legislation requiring that infrastructure necessary to core payment processing services be located on the territory of the Russian Federation.
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<b>South Korea</b>	The Financial Services Commission is considering regulations that would require insurance companies to maintain servers in country for company financial data and restrict transfers of such data (not pertaining to policy holders or employees) outside of South Korea's borders. This is despite provisions in the KORUS Free Trade Agreement, scheduled to take effect two years from entry into force. The free trade agreement permits the sending of data across the border intra-company or to third parties. The data transfer provision was intended to establish an innovative precedent in Asia, thereby allowing U.S. financial services companies to integrate regional and global operations by using established data processing hubs.
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<b>Ukraine</b>	Ukraine is considering laws and regulations that would establish a domestic monopoly for processing domestic payment transactions and exclude foreign networks from providing processing services.
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<b>Venezuela</b>	Venezuela has local data server requirements due to currency control for debit transactions. Venezuela has adopted a law that effectively requires in-country processing of domestic payment transactions.
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<b>Vietnam</b>	Vietnam has data residency laws, meaning that companies can store the data they collect only on servers in country.
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**Local data server requirements are misguided, overbroad in impact and often inadvertently harmful policies.**

Several justifications have been offered for imposing local data server requirements. In some cases, local data server requirements are viewed as necessary to advance national industrial policy and support national service providers. In other cases, the stated justification is to ensure that regulatory, law enforcement or national security personnel can access data residing on the servers. In still other cases, governments assert that they are protecting personal privacy or restricting access to banned or unlawful content. Although some of these various objectives may be legitimate if they are narrowly tailored to address the genuine harm, the blanket imposition of local data server requirements can unnecessarily damage service providers and consumers alike and slow economic growth. To avoid such disruption, governments should seek to narrowly tailor their regulatory requirements to meet essential needs and should avoid ill-advised, blanket local data server requirements. Governments should also ensure that their reviews, if any, of the national security implications of foreign investments focus exclusively on genuine national security risks.

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## IV. The United States as a Champion for Well-Structured Global Public Policy on Local Data Server Requirements

Sustained and credible U.S. leadership and multilateral collaboration are necessary to protect against blanket local data server requirements. BRT recognizes the good work of the United States and other key trading partners in negotiating well-crafted policies that address the integrated nature of today's global economy. We want to work with the U.S. government to promote further acceptance and implementation of these principles.

The E.U.-U.S. Trade Principles for Information and Communication Technology Services and the OECD Principles for Internet Policy-Making provide a solid foundation for advocating against local data server requirements. In relevant part, they state:

**The E.U.-U.S. Trade Principles for Information and Communication Technology Services — “Local Infrastructure”:** *Governments should not require ICT service suppliers to use local infrastructure, or establish a local presence, as a condition of supplying services.*

**The OECD Principles for Internet Policy-Making — “Promoting and Enabling the Cross-Border Delivery of Services”:** *Suppliers should have the ability to supply services over the Internet on a cross-border and technologically neutral basis in a manner that promotes interoperability of services and technologies, where appropriate. Users should have the ability to access and generate lawful content and run applications of their choice. To ensure cost effectiveness and other efficiencies, other barriers to the location, access and use of cross-border data facilities and functions should be minimized, providing that appropriate data protection and security measures are implemented in a manner consistent with the relevant OECD Guidelines and reflecting the necessary balance among all fundamental rights, freedoms and principles.*

BRT and the U.S. government can work together to implement these policy principles and assess disruptive market and policy trends. As an initial step to doing so, we have chosen to focus on the very real operating impacts that come from a growth in local data server requirements. At the same time, we realize that to be fully successful with other countries, the United States must lead by example and must have a best-practice and consistent position on these matters.

A clearly articulated U.S. position on the appropriate way to minimize barriers to data server location will allow the United States to advance its position that the unimpeded, free flow of cross-border data is of fundamental importance to the economic competitiveness of U.S. business, as well as business communities and societies around the world.

## V. Action Recommendations for the U.S. Government

1. The United States should publicly and unequivocally confirm its intention to implement the E.U.-U.S. Trade Principles for Information and Communication Technology Services and the OECD Principles for Internet Policy-Making — particularly the rules governing the location of infrastructure for cross-border data services.
2. The United States should clarify in a formal statement that it will not impose blanket local data server requirements. The United States also should clarify that it will consider imposing local data server requirements only when necessary to protect against genuine national security risks and that it will do so in a narrowly tailored manner. Such national security requirements should be imposed only after fully considering alternative solutions through consultation and collaboration with the business community and only if such alternatives would be ineffective in addressing the genuine national security concern. Absent such a specific finding by a designated government agency, a company would not be required to locate a server in the United States.
3. The United States should promote the implementation of this national policy:
  - ▶ As a global best practice and seek the implementation of similar principles by other countries through a range of bilateral consultations and free trade agreement negotiations and in multilateral fora, including but not limited to the U.S.-E.U. Summit, the U.S.-India Summit, the U.S.-China Strategic and Economic Dialogue, and APEC, and
  - ▶ As binding provisions in plurilateral free trade agreement negotiations like the ongoing Trans-Pacific Partnership and the proposed Transatlantic Partnership.

## VI. Conclusion

BRT commits to working with the U.S. government to promote and implement policies in line with the E.U.-U.S. Trade Principles for Information and Communication Technology Services and the OECD Principles for Internet Policy-Making. We also commit to actively partner with the U.S. government in its negotiations with foreign governments and to encourage the private sectors in other countries to have their governments accept and comply with these best practices.

By implementing these growth-oriented policies, large and small U.S. businesses will be able to seize the opportunities of the 21st-century global economy and help restore strong growth and job creation to the U.S. economy.

## Endnotes

- 1 While this paper is focused on the emerging trend of local data server requirements, BRT recognizes that localization requirements are spreading to other services and manufacturing sectors and that U.S. leadership and multilateral cooperation is also needed to protect against such requirements more generally. Reflecting this, BRT has previously urged the enforcement of U.S. rights under international trade and investment rules to ensure that U.S. companies and workers are not disadvantaged by discriminatory foreign policies such as indigenous innovation and other local preference requirements and that other countries comply with those rules.
- 2 The Renminbi (RMB) is the official currency of the People's Republic of China. RMB is legal tender in mainland China but not in Hong Kong or Macau. It is issued by the People's Bank of China, the monetary authority of China. Its name means "people's currency."



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