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**IBM System z**  
**August 2006**

**Linux Utilities for System z™**  
**(Linux Utilities)**

Frequently Asked Questions

Worldwide



LinuxUtilities FAQ

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## Linux Utilities for IBM System z

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**Question:**

What is IBM launching on August 16, 2006?

**Answer:**

IBM is launching the Linux<sup>®</sup> Utilities for IBM System z<sup>™</sup> (Linux Utilities). This is a suite of Linux solutions configured and tested<sup>1</sup> on IBM System z.

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**Question:**

What are Linux Utilities?

**Answer:**

Linux Utilities for IBM System z are a suite of Linux based solutions that have been tested<sup>1</sup> on System z. Each solution of the Linux Utilities provide specific infrastructure functions that compliment z/OS<sup>®</sup>. Linux Utilities provide tested alternatives that you can start using today.

Essentially, the Linux Utilities provide additional choices to you on where and how to run certain - what can be referred to as ‘commodity’ workloads – utilities.

While providing additional choices for your z/OS environment, they can help provide quick deployment, easy installation, and reduced time-to-deployment with minimal need for additional z/OS skills and resources.

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**Question:**

What is new about the Linux Utilities?

**Answer:**

While the componentry that makes up these solutions is generally available, IBM complements these utilities by providing technical documentation, covering details on installation and configuration based on IBM’s experiences. In addition, the Linux Utilities have been tested<sup>1</sup> on System z, in a z/OS and Linux workload environment, to help provide an easy and fast start for production use.

The Linux Utilities provide an additional option to enhance your z/OS environment, leveraging the advantages Linux brings to System z.

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<sup>1</sup> While expected to execute on all System z hardware, the Linux Utilities have been tested by IBM only on selected System z hardware in a z/OS and Linux workload scenario. For the software versions, levels and/or releases, each of the Linux Utilities have unique requirements, all of which are documented in their individual write-ups. Testing is based on a controlled environment. No assurance is given that an individual user will achieve throughput or performance equivalent to that which may be set forth herein.

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**Question:**

Why is IBM launching Linux Utilities? z/OS already has a large portfolio of infrastructure solutions, particularly in the areas of security and workload management. Why more, and why on Linux?

**Answer:**

IBM is launching Linux Utilities to provide more solutions on System z. IBM System z has a long history of supporting infrastructure related solutions. The Linux Utilities continue the platform's investment in infrastructure solutions by providing a wider choice of IT infrastructure applications to z/OS customers.

Infrastructure simplification and business integration are major IT challenges, and by integrating what can be referred to as 'commodity' workloads – utilities – with z/OS workloads onto the mainframe, you may benefit from the control and management that the System z offers.

Together, z/OS and Linux for System z can provide an ideal combination of computing strength and open source agility to compete in an on demand world.

With that in mind, IBM introduces the Linux Utilities for IBM System z.

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**Question:**

What is the current focus of the Linux Utilities?

**Answer:**

The current focus of the Linux Utilities is:

- Security
- Systems Management
- Networking and Performance Monitoring

These focus areas may change over time.

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**Question:**

What are the Linux Utilities that emphasize Security?

**Answer:**

The available Linux Utilities for Security are:

- StoneGate™ firewall by Stonesoft  
A firewall solution to create IT demilitarized zones (DMZ), multiple policies for communications, and hot standbys for peak workload activities. The Stone Gate firewall can compliment the robust z/OS encryption and Ipse support, helping customers implement their security policies in a diverse enterprise.
- webApp.secure™ by WebScurity  
A server and application-level security solution to help protect Web and data servers on z/OS from malicious traffic. The webApp.secure service together with z/OS IDS, IPsec, and capabilities can provide application level security for a comprehensive web solution.

- IBM Tivoli® Access Manager WebSEAL  
A network authentication and resource management solution, providing capabilities to build single sign-on solutions for Web-based z/OS transactions. This solution is an additional choice to RACF® and Vanguard Security Professionals Inc. products.
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**Question:**

What are the Linux Utilities that emphasize Systems Management?

**Answer:**

The available Linux Utilities for Systems Management is:

- OMEGAMON® z/OS Management Console  
*It consists of multiple components to monitor and manage critical online business applications and system resources on z/OS and a variety of other platforms within your enterprise. The OMEGAMON z/OS Management Console, OMEGAMON XE for z/OS, and Tivoli Monitoring (as well as many other Tivoli products) share common management components. The Tivoli Enterprise Portal Server (TEPS) component, provides the portal to integrate the information from the various products.*
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**Question:**

What are the Linux Utilities that emphasize Networking?

**Answer:**

The available Linux Utilities for Networking are:

- IBM Communication Controller for Linux on System z  
It enables a migration path to move NCP based SNA workloads from the IBM 3745 Communication Controller to System z servers.
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**Question:**

Why do Linux Utilities run on Linux and not on z/OS?

**Answer:**

While z/OS is rich in functionality already, why shouldn't you leverage the potential that Linux brings to the mainframe platform? Infrastructure simplification and business integration are major IT challenges, and by integrating 'commodity' workloads – utilities – with z/OS workloads onto the mainframe, you may benefit from the control and management that the System z offers. Together z/OS and Linux for System z can provide an ideal combination of computing strength and open source nimbleness to compete in an on demand world.

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**Question:**

What are the values of z/OS?

**Answer:**

z/OS is IBM's flagship mainframe operating system. While IBM System z servers are supported by a number of different operating systems, their most advanced features are powered by z/OS. z/OS is designed to deliver high qualities of service for enterprise transactions and data, and can extend these qualities to new applications using the latest software technologies. It provides a highly secure, scalable, high performance base on which to deploy SOA-enabled applications using Internet and Java™ technologies, providing a comprehensive and diverse application execution environment coupled with a highly scalable, security-rich and resilient enterprise data store.

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**Question:**

What are the advantages that Linux brings to System z?

**Answer:**

Linux is an open source operating system, distinguished by its attributes: flexibility, interoperability, a rich portfolio of applications, quality, ease of portability of code and skills.

It allows software vendors to use common tools to create systems that can work in concert. It offers the freedom of choice in applications and commodity infrastructure solutions.

Linux in and of itself is robust, however choosing the IBM mainframe to run Linux can add the mainframe core strengths to the strengths of Linux.

Linux on the mainframe is an ideal solution for infrastructure simplification and application sourcing. While you can host multiple Linux servers on a single System z, you can integrate Linux applications with core applications and data on z/OS.

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**Question:**

How do z/OS and Linux interact?

**Answer:**

The mainframe is a system designed to run not only diverse workloads, but multiple concurrent operating systems as well - the concept of one operating system supporting and interacting with another is part of the system design and implementation.

z/OS can provide the legendary scalability, reliability, security, and advanced management features for mission critical workloads synonymous with the mainframe. Linux can provide the flexibility and software portfolio of an open operating system. Together, Linux for System z can help provide a supporting environment for 'commodity' processing on behalf of z/OS. By taking on functionally common computing tasks, these 'commodity' workloads may benefit from control and management that System z offers.

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**Question:**

Can Linux Utilities leverage the System z virtualization capabilities?

**Answer:**

Yes. The Linux Utilities can leverage the world-class System z virtualization technology, running on a Linux server in a logical partitioning (LPAR) or on a virtual Linux server in z/VM<sup>®</sup>.

These technologies have value for Linux on the mainframe, since they provide the capability to virtualize computing resources and share them among multiple, independent operating environments and instances.

## Information Sources

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**Question:**

Where can I find the technical documentation, covering details on installation and configuration.?

**Answer:**

The technical documentation, as well as a White Paper, can be find on the Web site:

[ibm.com/zseries/os/linux/utilityservices](http://ibm.com/zseries/os/linux/utilityservices)

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**Question:**

Where can I find more information about the StoneGate firewall from Stonesoft?

**Answer:**

For more information about the StoneGate firewall visit the following Web site:

[www.stonesoft.com/products/IBM\\_zSeries/](http://www.stonesoft.com/products/IBM_zSeries/)

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**Question:**

Where can I find more information about the webApp.secure application from WebScurity?

**Answer:**

For more information about the webApp.secure application visit the following Web site:

[www.webscurity.com/pe.htm](http://www.webscurity.com/pe.htm)

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**Question:**

Where can I find more information about IBM Tivoli Access Manager WebSEAL?

**Answer:**

For more information about the IBM Tivoli Access Manager WebSEAL, contact your IBM marketing representative or IBM Business Partner, or visit the following IBM Web site:

[ibm.com/software/tivoli/products/access-mgr-e-bus/](http://ibm.com/software/tivoli/products/access-mgr-e-bus/)

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**Question:**

Where can I find more information about IBM Tivoli Monitoring?

**Answer:**

For more information about the IBM Tivoli Monitoring, contact your IBM marketing representative or IBM Business Partner, or visit the following IBM Web site:

[ibm.com/software/tivoli/products/monitor/](http://ibm.com/software/tivoli/products/monitor/)

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**Question:**

Where can I find more information about the IBM Communication Controller for Linux on System z?

**Answer:**

For more information about the IBM Communications Controller for Linux on System z, contact your IBM marketing representative or IBM Business Partner, or visit the following IBM Web site: [ibm.com/software/network/ccl/](http://ibm.com/software/network/ccl/)

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**Question:**

Where can I go for more detailed information on the Linux Utilities?

**Answer:**

See the following Web sites for additional information:

- Linux Utilities [ibm.com/zseries/os/linux/utilities](http://ibm.com/zseries/os/linux/utilities)
- z/OS [ibm.com/zseries/zos](http://ibm.com/zseries/zos)
- Linux on System z [ibm.com/zseries/linux](http://ibm.com/zseries/linux)
- z/VM [ibm.com/zseries/zvm](http://ibm.com/zseries/zvm)
- IBM System z [ibm.com/system/z](http://ibm.com/system/z)
- Software Vendor Products [ibm.com/zseries/os/linux/apps/all.html](http://ibm.com/zseries/os/linux/apps/all.html)
- System z - Security [ibm.com/systems/z/security/](http://ibm.com/systems/z/security/)

Brochures and White papers:

- z/OS: [ibm.com/zseries/zos/bkserv](http://ibm.com/zseries/zos/bkserv)
- Linux on System z: [ibm.com/zseries/os/linux/library](http://ibm.com/zseries/os/linux/library)

Redbook™:

- z/OS:
  - [www.redbooks.ibm.com](http://www.redbooks.ibm.com), searching for “z/OS”, or
  - [www.redbooks.ibm.com/cgi-bin/searchsite.cgi?Query=z/OS](http://www.redbooks.ibm.com/cgi-bin/searchsite.cgi?Query=z/OS)
- Linux on System z:
  - [www.redbooks.ibm.com](http://www.redbooks.ibm.com), searching for “Linux AND System z OR zSeries”, or
  - [www.redbooks.ibm.com/cgi-bin/searchsite.cgi?Query=Linux+AND+System+z+OR+zSeries](http://www.redbooks.ibm.com/cgi-bin/searchsite.cgi?Query=Linux+AND+System+z+OR+zSeries)



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