

A large King penguin stands on a snowy beach, looking down at a small, fluffy chick. The penguin has a black head and back with a white belly and a yellow patch on its neck. The chick is covered in dark, downy feathers with a white face. The background is a clear blue sky.

**FDR / UPSTREAM**  
*Linux on System z*

## ***Simplified Administration***

For Linux on System z users running under zVM, we have developed procedures for sharing a single copy of the UPSTREAM executables (binaries) on a read-only disk, between many virtual machines.

This will assist with:

- ✓ Minimizing Installation Tasks
- ✓ Simplifying Upgrading to New Releases
- ✓ Reducing DASD Storage Requirements

***FDR/UPSTREAM  
uses the tools  
and systems  
that you have  
been using  
for decades;  
integrating with  
your existing  
z/OS tape  
management,  
security and  
scheduling  
systems.***

*If your organization is like many others, you are finding that the values and benefits of running Linux on System z are plentiful. Our customers report that server consolidation and moving those open systems applications onto Linux on z results in:*

- ✓ Lower cost of operations
- ✓ Less servers
  - ✓ Fewer software licenses
    - ✓ Fewer resources to manage
    - ✓ Leveraging the mainframe's legendary reliability
    - ✓ Less energy, cooling and space

***...And now that your Linux data is on the System z Mainframe who better than INNOVATION, the makers of FDR, to provide the backup tool!***

# FDR/UPSTREAM

## *Linux on System z*

**FDR/UPSTREAM** provides reliable, file level data protection by backing up Linux on System z data directly to z/OS mainframe tape or DASD. UPSTREAM backups can be automatically initiated from the z/OS mainframe and provide:

- ✓ High-Speed Operations & Support for HiperSockets
- ✓ Online Database Agents for Oracle, DB2 & Notes
- ✓ ISPF & GUI Interfaces
- ✓ Automated Operations with JCL Condition Code Checking
- ✓ Automated Email Notification
- ✓ Exception Reporting

**FDR/UPSTREAM** performance tools include data de-duplication features including:

- ✓ Synthetic Full Merge Backup
- ✓ Duplicate File Support
- ✓ Segmented Backup Support

**UPSTREAM** operations can be completely automated by combining the data protection of Linux on System z data into existing disaster plans.

**FDR/UPSTREAM** provides comprehensive support for Linux on System z. In addition, UPSTREAM offers an extensive choice of file system support and backup types that include logical and physical volume.

***FDR/UPSTREAM also supports HiperSockets—the fastest connection between LPARs in the same host system.***

# **FDR/UPSTREAM** *and its Linux Rescuer to the Rescue*

**FDR/UPSTREAM** offers a complete backup and restore solution with disaster recovery for Linux on IBM System z. The Rescuer feature is a stand-alone system recovery facility, which allows administrators to completely restore all operating system data saved with FDR/UPSTREAM, without requiring special separate system backups.

**FDR/UPSTREAM** includes all supported file types in its file-level backup. It also incorporates in the backup (with no special set up, consideration or knowledge) file system mount points and some general information about each of these file systems. It's easy and simple-to-use, since all of this information is incorporated transparently in the backup and does not affect backup performance.

**FDR/UPSTREAM** will allow you to restore everything... the operating system as well as user data.



**For a No-Obligation FREE Trial  
or to Request a FREE Concept &  
Facilities Guide on FDR/UPSTREAM  
for Linux on System z, call 973.890.7300,  
e-mail [sales@fdrinnovation.com](mailto:sales@fdrinnovation.com)  
or visit [www.fdr.com/linux](http://www.fdr.com/linux)**